



Calhoun: The NPS Institutional Archive

DSpace Repository

Theses and Dissertations

1. Thesis and Dissertation Collection, all items

1987

An empirical analysis of the Navy Junior Reserve Officer Training Corps (NJROTC).

Zwartz, Henry Alan

http://hdl.handle.net/10945/22252

Downloaded from NPS Archive: Calhoun



Calhoun is the Naval Postgraduate School's public access digital repository for research materials and institutional publications created by the NPS community. Calhoun is named for Professor of Mathematics Guy K. Calhoun, NPS's first appointed -- and published -- scholarly author.

> Dudley Knox Library / Naval Postgraduate School 411 Dyer Road / 1 University Circle Monterey, California USA 93943



DANG RALD TARKTAN DORTO 2005





NAVAL POSTGRADUATE SCHOOL Monterey, California



THESIS

286

AN EMPIRICAL ANALYSIS OF THE NAVY JUNIOR RESERVE OFFICER TRAINING CORPS (NJROTC)

by

Henry Alan Zwartz

December 1987

Thesis Advisor: Second Reader: Ronald A. Weitzman

Fenn C. Horton

Approved for public release; distribution is unlimited.



UNCLASSIFIED SECURITY CLASSIFICATION OF THIS PAGE			
	REPORT DOCU	MENTATION PAGE	
18 REPORT SECURITY CLASSIFICATION	· · · · · · · · · · · · · · · · · · ·	16 RESTRICTIVE MARKINGS	
UNCLASSIFIED			
2a SECURITY CLASSIFICATION AUTHORITY		3 DISTRIBUTION AVAILABILITY OF	REPORT
26 DECLASSIFICATION DOWNGRADING SCHEDI	ULE	Approved for public re distribution is unlimi	•
4 PERFORMING ORGANIZATION REPORT NUMB	ER(S)	5 MONITORING ORGANIZATION REP	PORT NUMBER(S)
6a NAME OF PERFORMING ORGANIZATION	6b OFFICE SYMBOL (If applicable)	7a NAME OF MONITORING ORGANI	ZATION
Naval Postgraduate School	54	Naval Postgraduate Sc	hoo1
6c. ADDRESS (City, State, and ZIP Code)		7b. ADDRESS (City, State, and ZIP Co	de)
Monterey, CA 93943-5000		Monterey, CA 93943-50	00
Ba. NAME OF FUNDING SPONSORING ORGANIZATION	8b OFFICE SYMBOL (If applicable)	9 PROCUREMENT INSTRUMENT IDEN	NTIFICATION NUMBER
8c. ADDRESS (City, State, and ZIP Code)		10 SOURCE OF FUNDING NUMBERS	
			TASK WORK UNIT ACCESSION NO
12. PERSONAL AUTHOR(S) ZWARTZ, HENRY A. 13a TYPE OF REPORT MASTER'S THESIS FROM FROM	OVERED TO	14. DATE OF REPORT (Year, Month, Da 1987 - DECEMBER	ay) 15 PAGE COUNT 116
16 SUPPLEMENTARY NOTATION			
17 COSATI CODES	18 SUBJECT TERMS (Continue on reverse if necessary and i	dentify by block number)
FIELD GROUP SUB-GROUP	Demographics,	serve Officer Training Co Graduate Military Accessi	lons, Graduate
19 ABSTRACT (Continue on reverse if necessary		ations, Tracking, Perform	nance Statistics
This thesis examined the from Defense Manpower Data (profile of this program. So useful in measuring the perprogram in relation to simil Results of this analysis in Training Corps can become meaccessions was also produced	Center accession tatistical analy formance of the lar programs opedicate the areas ore efficient.	sis performed provided in Navy Junior Reserve Offic rated by the other milita where the Navy Junior Re	e used to build a formation which is er Training Corps ry branches.
20 DISTRIBUTION/AVAILABILITY OF ABSTRACT		21 ABSTRACT SECURITY CLASSIFICA	TION
☑ UNCLASSIFIED/UNLIMITED ☐ SAME AS 22a NAME OF RESPONSIBLE INDIVIDUAL	RPT DTIC USERS	22b TELEPHONE (Include Area Code)	
Ronald A. Weitzman		408/646-2694	54

DD FORM 1473, 84 MAR

1

Approved for public release; distribution is unlimited

An Empirical Analysis of the Navy Junior Reserve Officer Training Corps (NJROTC)

by

Henry Alan Zwartz Lieutenant, United States Navy B.S., Chapman College, 1980

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL December 1987

ABSTRACT

This thesis examined the Navy Junior Reserve Officer Training Corps program. Data from Defense Manpower Data Center accession and separation files were used to build a profile of this program. Statistical analysis performed provided information which is useful in measuring the performance of the Navy Junior Reserve Officer Training Corps program in relation to similar programs operated by the other military branches. Results of this analysis indicate the areas where the Navy Junior Reserve Officer Training Corps can become more efficient. An accurate means of tracking military accessions was also produced.



TABLE OF CONTENTS

Ι.	INTE	RODUCTION	11
	Α.	PROBLEM	11
	В.	BACKGPOUND	13
	С.	OBJECTIVES	17
	D.	SCOPE, LIMITATIONS, AND ASSUMPTIONS	17
	Е.	LITERATURE PEVIEW AND METHODOLOGY	19
II.	METH	HODOLOGY	20
	Α.	DATA FILES	20
	В.	VARIABLES	21
	С.	STRUCTURE OF ANALYSIS	21
III.	ANAL	LYSIS	27
	Α.	ACCESSIONS DATA	27
	В.	SEPARATIONS DATA	35
IV.	SUMM	MARY AND RECOMMENDATIONS	40
	Α.	SUMMARY	40
	В.	RECOMMENDATIONS	41
	С.	FUTURE RESEARCH	41
APPENDI	X A:	DEFENSE MANPOWER DATA CENTER FILE FORMAT SHEET	43
APPENDI	X B:	TABLE DEFINITION KEY	45
APPENDI	X C:	TABLES FOR ALL SERVICES JROTC GRADUATES FOR FISCAL YEARS 1977-1986	49

APPENDIX D:	TABLES FOR NAVY JROTC GPADUATES FOR FISCAL YEARS 1977-1986 57
APPENDIX E:	TABLES FOR ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986
APPENDIX F:	TABLES FOR NAVY JROTC GRADUATES . FOR FISCAL YEAR 1986
END NOTES .	
BIBLIOGRAPH	Y114
INITIAL DIS	TRIBUTION LIST115

LIST OF TABLES

1.	NUMBER OF JUNIOP RESERVE OFFICER TRAINING CORPS (JROTC) UNITS AUTHORIZED AND ON-LINE BY SERVICE, SEPTEMBER 1987	12
2.	NUMBER OF JUNIOP RESERVE OFFICER TRAINING CORPS (JPOTC) CADETS BY SERVICE, SEPTEMBER 1987	14
3.	LIST OF VARIABLES FOR ANALYSIS BY DMDC DATA BASE FILE FORMAT SHEET COLUMN NUMBER	22
4.	TOTAL NUMBER OF JROTC GRADUATES (ALL SERVICES) WHO ENLISTED IN THE ACTIVE DUTY MILITARY BY SERVICE, FISCAL YEARS 1977-1986	26
5.	TOTAL NUMBER AND PERCENT OF ACTIVE DUTY ENLISTMENTS OF JROTC GRADUATES (ALL SERVICES) BY SERVICE JROTC, FISCAL YEARS 1977-1986	28
6.	TOTAL NUMBER AND PERCENT OF JROTC UNITS BY SERVICE, SEPTEMBER 1987	29
7.	HOME OF RECORD FOR NAVY JROTC GRADUATES WHO ENLISTED IN THE MILITARY BY SERVICE (PERCENT), FISCAL YEARS 1977-1986	31
3.	TOTAL NUMBER OF ALL SERVICES JROTC GRADUATES WHO SEPARATED FROM ACTIVE DUTY MILITARY SERVICES BY SERVICE, FISCAL YEARS 1977-1986	37
9.	PERCENT OF NAVY JROTC GRADUATES SEPARATED FROM ACTIVE DUTY MILITARY SERVICE BY OCCUPATIONAL AREA, FISCAL YEARS 1977-1986	39
C-1	ALL SERVICES JROTC MALE GRADUATES FOR FISCAL YEARS 1977-1986, BY RACE/ETHNIC GROUP AND JROTC PROGRAM GRADUATED FROM	49
C-2	ALL SERVICES JROTC FEMALE GRADUATES FOR FISCAL YEARS 1977-1986, BY RACE/ETHNIC GROUP AND JROTC PROGRAM GRADUATED FROM	50
C-3	ALL SERVICES JROTC MALE GRADUATES FOR FISCAL YEARS 1977-1986, BY RACE/ETHNIC GROUP AND BRANCH OF SERVICE ENLISTED INTO	51
C-4	ALL SERVICES JROTC FEMALE GRADUATES FOR FISCAL YEARS 1977-1986, BY RACE/ETHNIC GROUP AND BRANCH OF SERVICE ENLISTED INTO	52

C-5	ALL SERVICES JROTC MALE GRADUATES FOR FISCAL YEARS 1977-1986, BY JROTC PROGRAM GRADUATED FROM AND BRANCH OF SERVICE ENLISTED INTO	53
C-6	ALL SERVICES JROTC FEMALF GRADUATES FOR FISCAL YEARS 1977-1986, BY JROTC PROGRAM GRADUATED	54
C-7	ALL SERVICES JROTC MALE GRADUATES FOR FISCAL YEARS 1977-1986, BY AFOT CATEGORY AND BRANCH OF SERVICE ENLISTED INTO	5 5
C-8	ALL SEPVICES JROTC FEMALE GRADUATES FOR FISCAL YEARS 1977-1986, BY AFQT CATEGORY AND BRANCH OF SERVICE ENLISTED INTO	56
D-1	NAVY JROTC MALE GRADUATES FOR FISCAL YEARS 1977-1986, BY RACE/ETHNIC GPOUP AND JROTC PROGRAM GRADUATED FROM	57
D-2	NAVY JROTC FEMALE GRADUATES FOR FISCAL YEARS 1977-1986, BY RACE/ETHNIC GROUP AND JROTC PROGRAM GRADUATED FROM	58
D-3	NAVY JROTC MALE GRADUATES FOR FISCAL YEARS 1977-1986, BY PACE/ETHNIC GROUP AND BRANCH OF SERVICE ENLISTED INTO	59
D-4	NAVY JROTC FEMALE GRADUATES FOR FISCAL YEARS 1977-1986, BY RACE/ETHNIC GROUP AND BRANCH OF SERVICE ENLISTED INTO	60
D-5	NAVY JROTC MALE GRADUATES FOR FISCAL YEARS 1977-1986, BY JROTC PROGRAM GRADUATED FROM AND BRANCH OF SERVICE ENLISTED INTO	61
	NAVY JPOTC FEMALE GRADUATES FOR FISCAL YEARS 1977-1986, BY JROTC PROGRAM GRADUATED FROM AND BRANCH OF SERVICE ENLISTED INTO	62
D-7	NAVY JROTC MALE GRADUATES FOR FISCAL YEARS 1977-1986, BY AFQT CATEGORY AND BRANCH OF SERVICE ENLISTED INTO	63
D-8	NAVY JROTC FEMALE GRADUATES FOR FISCAL YEARS 1977-1986, BY AFQT CATEGORY AND BRANCH OF SERVICE ENLISTED INTO	64
E-1	ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY BRANCH OF SERVICE ENLISTED INTO AND JROTC PROGRAM GRADUATED FROM	65

E-2	TERM OF ENLISTMENT FOR ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986	66
E-3	ENTERING PAYGRADE FOR ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986	67
E-4	ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY SEX AND BRANCH OF SERVICE ENLISTED INTO	68
E-5	ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY RACE/ETHNIC GROUP AND BRANCH OF SERVICE ENLISTED INTO	69
E-6	ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY RACE/ETHNIC GROUP AND AFQT CATEGORY	70
E-7	ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY SEX AND AFQT CATEGORY	71
E-8	ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY SEX AND RACE/ETHNIC GROUP	72
E-9	ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY HIGHEST YEAR OF EDUCATION COMPLETED AND BRANCH OF SERVICE ENLISTED INTO	73
E-10	ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY HIGHEST YEAR OF EDUCATION COMPLETED AND RACE/ETHNIC GROUP	74
E-11	ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY HIGHEST YEAR OF EDUCATION COMPLETED AND SEX	75
E-12	ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY AGE AT ENTRY INTO THE MILITARY AND BRANCH OF SERVICE ENLISTED INTO	76
E-13	ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY AGE AT ENTRY INTO THE MILITARY AND RACE/ETHNIC GROUP	77
E-14	ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY AGE AT ENTRY INTO THE MILITARY AND SEX	78
	ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY HOME OF RECORD AND JROTC PROGRAM GRADUATED FROM	79

E-16	ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY AFQT CATEGORY AND BRANCH OF SERVICE ENLISTED INTO	84
E-17	ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY JROTC PROGRAM GRADUATED FROM AND RACE/ETHNIC GROUP	85
E-13	ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY JROTC PROGRAM GRADUATED FROM AND PACE/ETHNIC GROUP	86
E-19	ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY HIGHEST YEAR OF EDUCATION COMPLETED AND RACE/ETHNIC GROUP	87
E-20	ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY HIGHEST YEAR OF EDUCATION COMPLETED AND RACE/ETHNIC GROUP	88
E-21	ALL SERVICES JROTC MALE GRADUATES FOR FISCAL YEAR 1986, BY AFQT CATEGORY AND RACE/ETHNIC GROUP	89
E-22	ALL SERVICES JROTC FEMALE GRADUATES FOR FISCAL YEAR 1986, BY AFQT CATEGORY AND RACE/ETHNIC GROUP	90
E-23	ALL SERVICES JROTC MALE GRADUATES FOR FISCAL YEAR 1986, BY BRANCH OF SERVICE ENLISTED INTO AND RACE/ETHNIC GROUP	91
E-24	ALL SERVICES JROTC FEMALE GRADUATES FOR FISCAL YEAR 1986, BY BRANCH OF SERVICE ENLISTED INTO AND RACE/ETHNIC GROUP	92
F-1	TERM OF ENLISTMENT FOR ALL NAVY JROTC PROGRAM GRADUATES	93
F-2	ENTERING PAYGRADE FOR ALL NAVY JROTC PROGRAM GRADUATES	94
F-3	NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY SEX AND BRANCH OF SERVICE ENLISTED INTO	95
F-4	NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY RACE/ETHNIC GROUP AND BRANCH OF SERVICE ENLISTED INTO	96

F-5	NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY RACE/ETHNIC GROUP AND AFQT CATEGORY 97
F-6	NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY SEX AND AFQT CATEGORY
F-7	NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY SEX AND RACE/ETHNIC GROUP
F-8	NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY HIGHEST YEAR OF EDUCATION COMPLETED AND BRANCH OF SERVICE ENLISTED INTO
F-9	NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY HIGHEST YEAR OF EDUCATION COMPLETED AND RACE/ETHNIC GROUP
F-10	NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY HIGHEST YEAR OF EDUCATION COMPLETED AND SEX
F-11	NAVY JROTC PROGRAM GPADUATES FOR FISCAL YEAR 1986, BY AGE AT ENTRY INTO THE MILITARY AND BRANCH OF SERVICE ENLISTED INTO
F-12	NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY AGE AT ENTRY INTO THE MILITARY AND RACE/ETHNIC GROUP
F-13	NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY AGE AT ENTRY INTO THE MILITARY AND SEX
F-14	NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY HOME OF RECORD AND JROTC PROGRAM GRADUATED FROM
F-15	NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY AFQT CATEGORY AND BRANCH OF SERVICE ENLISTED INTO
F-16	NAVY JROTC MALE PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY JROTC PROGRAM GRADUATED FROM AND RACE/ETHNIC GROUP
F-17	NAVY JROTC FEMALE PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY JROTC PROGRAM GRADUATED FROM AND RACE/ETHNIC GROUP

I. INTRODUCTION

A. PROBLEM

There used to be a time when the Department of Defense would be granted most of its requests for increased spending in order to strengthen the military power and defense posture of the United States military. Budget deficits became the norm. It was not until the budget deficits started growing at alarming rates that they became major political issues in the campaigns of politicians.

While candidates for political office gave promises to balance the budget if they were elected, these promises went unfulfilled. Congressional leaders have finally acknowledged that the free-spending spirit of the government must be curtailed. With the passage of the Gramm-Rudman Bill, legislators are now beginning to consider budget cuts in order to reduce the federal deficit.

Obviously, one of the major problems of budget cutting is trying to decide what types of cuts should be made. Many programs are undergoing some type of budget reduction. The Junior Reserve Officer Training Corps (JROTC) program has not been immune to these reductions. With an initial authorization level of 1,600 JROTC units divided among the Army, Navy, Marine Corps, and Air Force, the total for all services is presently frozen at 1,479 units. This is shown

in Table 1. As Table 1 indicates, the Services are presently at about 8 percent below their authorization level. Due to a reduced budget, the Services are not allowed to expand beyond their current levels.

Program Managers for the Navy Junior Reserve Officer Training Corps (NJROTC) need information that will allow them to make more knowledgeable decisions about where and how their budgets can be trimmed.

	TABLE 1	
	NIOR RESERVE OFFICER TRA	
SERVICE	CURRENT AUTHORIZATION	AS OF SEP 87 ON-LINE
ARMY	896	862 (96%)
NAVY	289	241 (83%)
MARINES	80	80 (100%)
AIR FORCE	335	296 (88%)
TOTAL	1,600	1,479 (92%)
SOURCE:	CHIEF OF NAVAL EDUCATION SEPTEMBER 1987.	ON AND TRAINING,

This thesis attempts to provide an empirical analysis of the NJROTC program. In so doing, it answers several questions about NJROTC graduates such as:

- What states do those who enlist in the military come from?
- What branch of the military do they enter?

- What is their Armed Forces Qualification Test (AFQT) category?
- What age are they most likely to enter the military?
- What career fields do they enter?

Answers to these questions are not only valuable to program managers, but can also be of value to recruiters of NJROTC graduates. This will be shown in Section III of the thesis. Data used were for fiscal years 1977 through 1986. Fiscal year 1987 data were not used because final updates of data files for 1987 were not completed in time for inclusion in this study.

B. BACKGROUND

The JROTC program can trace its origins back to 1911. However, the Army JROTC program was not officially recognized until the National Defense Act of 1916. The ROTC Revitalization Act of 1964 increased the number of JROTC units authorized and required the Air Force, Navy, and Marine Corps to establish JROTC programs. By 1966, all of the Services had activated their respective programs.

The JROTC program is a Department of Defense-funded voluntary training program for high school men and women in grades 9 through 12. There are currently over 219,000 cadets enrolled in JROTC units nationwide. Their distribution by Service is shown in Table 2.2

TABLE	2
NUMBER OF JUNIOR RESERVE OFFICE,	
SERVICE	NUMBER OF CADETS
ARMY	136,502
NAVY	30,728
MARINES	10,660
AIR FORCE	41,505
TOTAL	219,395
SOURCE: CHIEF OF NAVAL EN	DUCATION AND TRAINING,

The ROTC Revitalization Act of 1964 put the responsibility of establishing JROTC units on the Secretary of each the Military Departments. The act also called for an equitable geographical distribution of JROTC units throughout the nation. A minimum of 100 students are necessary for establishment and continuation of a unit. Schools are reguired to provide adequate facilities for classrooms, equipment storage space, and drill areas, and conduct, minimum, a three-year course of military instruction. Course membership in JROTC is limited to students who maintain academic and discipline standards acceptable military. The Services are required to provide necessary texts, equipment, and uniforms, and to establish the performance standards for their units. No military obligation is incurred for participating in JROTC. 3

To enroll in the JROTC program, a student must be:

- 1. A citizen of the United States.
- 2. 14 years of age or older.
- 3. In good academic standing in school.
- 4. Able to participate in the physical education program of the school.
- 5. Selected by the military instructor and school officials.
- 6. Able to pass prescribed screening tests.

The JROTC program is a joint effort by the military and local school authorities to provide high school students with military science information consistent with other fields in secondary education. The JROTC program is built upon contemporary concepts of education and its goals and objectives are tuned to the needs of today's student. As prescribed by the implementing legislation, certain traditional concepts are included. The JROTC program, however, is specifically designed to meet the requirements of this era of scientific achievement and technological development, and the program is expected to play a key part in preparing future citizens for their roles in modern society. 4

The JROTC program provides an opportunity for secondary school students to learn about the basic elements and requirements for national security and their personal obligations as Americans. As described in the NJPOTC

<u>Information Booklet</u>, the JROTC program has the following specific goals and objectives.⁵

1. Goals

- a. Develop informed and responsible citizens.
- b. Strengthen character.
- c. Promote an understanding of the basic elements and requirements for national security.
- d. Develop habits of self-discipline.
- e. Develop respect for and understanding of the need for constituted authority in a democratic society.
- f. Develop an interest in the military services as a possible career.

2. Objectives

- a. Students will be able to readily accept the responsibility and importance of citizenship as it relates to the democratic principles upon which our country is founded.
- b. Students will be able to use operative principles of military leadership to attain a given goal or objective.
- c. Students will be able to achieve group solidarity and unit pride through the use of teamwork concepts.
- d. Students will be able to learn to use the chain of command as a means for communicating a redress, request, or grievance.
- e. Students will be able to rely on the intrinsic value of good order and discipline in the accomplishment of assigned objectives.
- f. Students will have a sound knowledge of military operations, organization, and the military's role in national and international security.

C. OBJECTIVES

This thesis will examine the demographic and other characteristics of Navy JROTC program graduates who enlist in the Army, Navy, Marine Corps, and Air Force. 'It will also provide a solid foundation upon which to build further research. The data analysis should also furnish Navy JROTC program managers with new information that can be useful in conducting efficiency and cost-benefit analyses.

D. SCOPE, LIMITATIONS, AND ASSUMPTIONS

The goal of this thesis is to provide an analysis of data that can be used by NJROTC program managers to perform efficiency studies of the program and cost-benefit analysis during the present era of budget cutting. The results of this analysis, for example, should help to lay the basic groundwork for future research in areas of regression analysis. It is beyond the scope of this thesis to explain why certain characteristics occur. Rather, it is intended that this work will provide an initial, broadbased foundation of information upon which other researchers can design future studies.

Limitations that affected the research accomplished for this thesis included:

- Data records maintained by some JROTC program managers pertaining to the early years of this study, were unavailable.

- The only data available from JROTC program managers were "soft" (that is, survey data which is not considered very accurate).
- There was a lack of previous research work. No prior research work was done in this area. Therefore, this thesis could not build upon previous work.
- There was a scarcity of literature available for review.

 Furthermore, literature that was available was often too
 general in nature.

The following assumptions were made in the study:

- Errors in the data, caused by the incorrect filling out of data base file format sheets, are no greater than one percent. 6
- Differences in totals between cross-tabulations of two variables versus three variables is also no greater than one percent. 7
- The data used in this study start in 1976 ten years after the program began. 8 The assumption is made that the number of JROTC units has remained fairly constant. This is true for all branches except the Army JROTC, which has increased its total units by 35 percent between fiscal years 1977 and 1986. Since the data analysis is measured by percentages, it is assumed that this will not have a large influence on the findings.

E. LITERATURE REVIEW AND METHODOLOGY

The literature reviewed was mostly general in nature. No record of any prior research performed in this area could be found. Because this is apparently the first research work of its type using "hard" data, this thesis emphasizes the presentation of descriptive statistics supplied by the Defense Manpower Data Center (DMDC), in Monterey, California.

II. METHODOLOGY

A. DATA FILES

The data files were supplied by the Defense Manpower Data Center (DMDC) located in Monterey, California. has many data files dating back to fiscal year 1971. However, the files used for this thesis are the Active Duty Service Gain Files beginning with fiscal year 1977 and ending with fiscal year 1986. This ten-year period was chosen because the Active Duty Service Gain Files only maintain partial data for fiscal year 1976. Fiscal year 1977 was the first full year of complete data. Fiscal year 1987 data files were not completely updated at the time of this thesis research and, therefore, fiscal year 1986 was the of complete data available. These data files are updated on a quarterly basis. These files only cover active duty enlistments. They do not cover reservists or officer accessions.

Another file which was used in this thesis research was the Active Duty Loss Transaction Files for fiscal years 1977 through 1986. These files are available back to fiscal year 1971. However, as with the Active Duty Service Files, data prior to fiscal year 1977 is incomplete and the fiscal year 1987 data files were not yet updated at the time of this research.

B. VARIABLES

An example of the data base file format sheet can be found in Appendix A. The variables to be analyzed and the corresponding columns of the data base file format are listed in Table 3.

C. STRUCTURE OF ANALYSIS

The Statistical Analysis System (SAS) computer package was used for the data analysis. Two-and three-way tables of cross-classification, also known as contingency tables, were used in the data analysis. In order to explore any possible pattern or relationship between variables, it is useful to first convert these results into percentages based on the following: 9

- 1. The overall total
- 2. The row totals
- 3. The column totals

"Supertables" were also extensively used. A supertable is essentially a collection of cross-classification tables for the same column variable and categories. However, as many row variables as desired are included for comparison against the column variable. The data in each cell of the table are always given as a percentage of its corresponding row total. This permits line-by-line comparisons for the categories within a particular row variable as well as for the categories among the various row variables. 10

TABLE 3

LIST OF VARIABLES FOR ANALYSIS BY DMDC DATA BASE FILE FORMAT SHEET COLUMN NUMBER.

VARIABLE #	COLUMN #	VARIABLE
1.	10	Home of Record (HOR)
2.	16	Age at Entry (AGEENT)
3.	18/92	Highest Year Education Completed(HYEC)
4.	19	SEX
5.	22	Pace Ethnic (RACEETH)
6.	26	AFQT Groups (AFQT)
7.	39/94	Service of Accession (SERVICE)
8.	61	Term of Enlistment (TOE)
9.	62	Entry Paygrade (ENTPG)
10.	75	Youth Program (JROTC)
11.	86/87	Total Active Federal Military Service (YEARS)
12.	88/89	DOD Primary Occupation Code (DPOC2)
13.	93	Paygrade (PG)
14.	100	Inter-Service Separation Code (ISCX)
15.	111	Character of Service (CHARSVC)

SOURCE: DEFENSE MANPOWER DATA CENTER (DMDC), SEPTEMBER 1987.

The following is a list of cross-classification tables that were analyzed for accessions:

- 1. Term of Enlistment (TOE)
- 2. Entering Paygrade (ENTPG)
- 3. Home of Record (HOR)
- 4. Age at Entry (AGEENT) by Sex
- 5. AGEENT by Race Ethnic (RACEETH)
- 6. AGEENT by Service
- 7. Highest Year Education Completed (HYEC) by Sex
- 8. HYEC by RACEETH
- 9. HYEC by Service
- 10. Sex by RACEETH
- 11. Sex by AFQT Group (AFQT)
- 12. Sex by Service
- 13. RACEETH by AFQT
- 14. RACEETH by Service
- 15. AFQT by Service
- 16. Youth Program (JROTC) by Service

The following is a list of cross-classification tables which were analyzed for separations:

- 1. JROTC by Service
- 2. Inter-service Separation Code (ISCX) by Total Active Federal Military Service (YEARS)
- 3. YEARS by Service
- 4. YEARS by JROTC
- 5. ISCX by Service

- 6. ISCX by JROTC
- 7. Fiscal Year Loss by Service
- 8. Character of Service (CHARSVC) by Service
- 9. CHARSVC by JROTC
- 10. Pay Grade (PG) by Service
- 11. PG by JROTC
- 12. HYEC by Service
- 13. HYEC by JROTC
- 14. DOD Primary Occupation Code (DPOC2) by Service
- 15. DPOC2 by JROTC
- 16. Sex by Service
- 17. Sex by JROTC
- 18. RACEETH by Service
- 19. RACEETH by JROTC.

This final list consists of three-way tables that were analyzed for accessions:

- 1. HOR by JROTC for Service
- 2. HOR by AFQT for Service
- 3. HOR by HYEC for Service
- 4. AGEENT by RACEETH for Sex
- 5. AGEENT by JROTC for Service
- 6. RACEETH by JROTC for Sex
- 7. RACEETH by Service for Sex
- 8. RACEETH by AFQT for Sex
- 9. RACEETH by HYEC for Sex
- 10. JROTC by Service for Sex

- 11. AGEENT by Service for Sex
- 12. HYEC by JROTC for Sex
- 13. HYEC by JROTC for Service
- 14. AFOT by Service for Sex
- 15. AFQT by JROTC for Service

The population size for data analysis is represented in Table 4. Total size is 56,852. This is the total population of JROTC graduates from all of the Services JROTC programs that enlisted into the active duty military in fiscal year 1977 through fiscal year 1986. This population was chosen because complete data was available for use in the following analysis.

					TABLE	4						1
TOTAL NUMBER OF JROTC GRADUATES	ER OF JR	OTC GRADA		L SERVIC	ERVICES) WHO ENLISTED IN FISCAL YEARS 1977 - 1986	ENLISTEI 1977 –]) IN THE 1986	ACTIVE [UTY MIL.	(ALL SERVICES) WHO ENLISTED IN THE ACTIVE DUTY MILITARY BY SERVICE, FISCAL YEARS 1977 - 1986	SERVICE,	
	FY 77	FY 78	FY 79	FY 80	FY 81	FY 82	FY 83	FY 84	FY 85	FY 86	TOTAL	
ARMY	2390	2680	2393	2444	2131	1999	2480	3509	3033	3238	26,297	1
	(40.18)	(45.58)	(43.61)	(44.84)	(43.24)	(42.98)	(49.24)	(52,39)	(47.96) (50.21)	(50.21)	(46.26)	i
,	1725	1438	1295	1088	1028	849	1056	1291	1450	1463	12,683	
NAVY	(29.00)	(29.00) (24.46)	(23.60)	(19.96)	(20.86)	(18.25)	(20.96) (19.27) (22.93)	(19.27)	(22.93)	(22.69)	(22,31)	
	504	909	579	069	286	597	909	068	829	752	6,637	
MARINES	(8.47)	8.47) (10.29)	(10.55)	(12.66)	(11.89)	(12.84)	(12.01)	(13.29) (13.11)	(13.11)	(11.66)	(11.67)	
	1329	1157	1220	1228	1183	1206	968	1008	1012	966	11,235	
AIR FORCE	(22.34)	(19.68)	(22.23)	(22.53)	(24.01) (25.93)	(25.93)	(17.79)	(15.05)	(16.00)	(15.44)	(19.76)	
T. WOOD	5948	2880	5487	5450	4928	4651	5037	8699	6324	6449	56,852	
IOIAL	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	

SOURCE: DEFENSE MANPOWER DATA CENTER, NOVEMBER 1987

*Figures in parentheses are percent of yearly totals.

III. ANALYSIS

A. ACCESSIONS DATA

When comparing Table 4 and Table 5, there is a difference of 526 accessions. This is due to one percent of the accessions coming from unknown JROTC units. These accessions were deleted from Table 5.

The first important observation is that while the Navy has 16.3 percent of the JROTC units (as shown in Table 6), only 15.02 percent of all active duty enlisted accessions come from Navy JROTC programs. But the Navy still comes out ahead, because 22.79 percent of JROTC graduate accessions enter the active duty Navy. Although 41.38 percent of Navy JROTC graduate accessions enlist in the Navy, another 31.8 percent enlist in the Army. One reason that might explain such a high percentage of Navy JROTC graduates enlisting in the Army could be a lack of interest generated by Navy JROTC summer camps. Another reason could be the fact that Navy JROTC units are usually located closer to Army bases. A third reason could be students who were interested in other service JROTC programs were forced to enter the Navy JROTC program because the other service programs were not available in their area. A survey could be used to determine the answer to this problem. A researcher could send out a survey form to Navy JROTC graduates, especially to graduates who enlist in the military, to determine the enlistment propensities and attitudes of the graduates.

The data in Table 5 are also invaluable in determining a cost-benefit analysis of the Navy JROTC. In fiscal year 1986, the Navy JROTC costs were approximately \$10.7 million, while only 378 Navy JROTC graduates enlisted in the Navy. This converts to

TABLE 5						
TOTAL NUMBER AND PERCENT OF ACTIVE DUTY ENLISTMENTS OF JROTC GRADUATES (ALL SERVICES) BY SERVICE JROTC, FISCAL YEARS 1977 - 1986						
	ARMY JROTC	NAVY JROTC	MARINE JROTC	AIR FORCE JROTC	TOTAL	
ARMY % ROW % COLUMN %	17,810 (31.62) (68.81) (55.03)	2,690 (4.78) (10.39) (31.80)	633 (1.12) (2.45) (28.23)	4,748 (8.43) (18.35) (35.81)	25,881 (100) (45.95)	
NAVY % ROW % COLUMN %	6,207 (11.02) (48.36) (19.18)	3,500 (6.21) (27.27) (41.38)	440 (.78) (3.43) (19.63)	2,688 (4.77) (20.94) (20.27)	12,835 (100) (22.79)	
MARINES % ROW % COLUMN %	3,313 (5.88) (50.66) (10.24)	1,181 (2.10) (18.06) (13.96)	878 (1.56) (13.42) (39.16)	1,168 (2.07) (17.86 (8.81)	6,540 (100) (11.61)	
AIR FORCE % ROW % COLUMN %	5,035 (8.94) (45.48) (15.55)	1,088 (1.93) (9.83) (12.86)	291 (.52) (2.63) (12.98)	4,656 (8.27) (42.06) (35.11)	11,070 (100) (19.65)	
ROW %	(57.46)	(15.02)	(3.98)	(23.54)	(100)	
TOTAL	32,365	8,459	2,242	13,260	56,326	
COLUMN %	(100)	(100)	(100)	(100)	(100)	
SOURCE: DEFENSE MANPOWER DATA CENTER, NOVEMBER 1987						

an astounding cost of over \$28 thousand per accession. The cost decreases substantially if enlistments into other services are included. For example, with a total of 961 accessions across all Services, the cost per accession drops to about \$11 thousand. If other service JROTC graduates who enlist in the Navy are included, (a total of 1,463 accessions), the cost per Navy accession falls again to about \$7 thousand. The costs are eventually decreased even further if accessions into the reserve and officer programs are included.

T	ABLE 6
	NT OF JROTC UNITS BY SERVICE, EMBER 1987
SERVICE	UNITS
ARMY %	862 (58.28)
NAVY %	241 (16.30)
MARINES %	80 (5.41)
AIR FORCE	296 (20.01)
TOTAL	1,479 (100)

SOURCE: CHIEF OF NAVAL EDUCATION AND TRAINING, SEPTEMBER 1987

Continuing with the data analysis, it was found that 72 percent of Navy JROTC graduates enlist for four years, while 6.5 percent enlist for greater than four years. In fiscal years 1985 and 1986, eight-year enlistments comprised five percent of total enlistments. Fifty-four percent of the Navy JROTC graduates enter at a paygrade of E-3, and 31 percent enter at paygrade E-2.

By studying the Home of Record data in Table 7, the Navy JROTC program manager can find the percentage of accessions "produced" be each state. An investigation of differences between high and low production states could help to isolate the important factors and possibly help to improve production in states at the bottom end of the distribution. The manager could also use other Home of Record data to discover what states are supplying Navy enlistments from other JROTC programs, such as Georgia and South Carolina, where 66.8 percent and 83.7 percent of Navy enlistments in these states, respectively, come from Army JROTC programs. The program manager could move more units into these areas and remove units from the less productive areas.

The age at which most NJROTC graduates enter the Navy is 18 years. Overall, about 42 percent enlist at this age, followed by 22 percent at 19 years. Thirteen percent are 17 years of age and 23 percent are 20 years or older. Ninety-one percent are men and nine percent are women. The proportion of whites who enlist from Navy JROTC programs is

TABLE 7

HOME OF RECORD FOR NAVY JROTC GRADUATES WHO ENLISTED IN THE MILITARY BY SERVICE (PERCENT),
FISCAL YEARS 1977 - 1986

		EARS 197			
STATE	ARMY	NAVY	MARINES	AIR FORCE	TOTAL
ALABAMA	.79	.73	.39	.24	2.15
ALASKA	.08	.14	.02	0	.24
AMERICAN SAMOA	0	0	0	0	0
ARIZONA	.39	.76	.40	.27	1.82
ARKANSAS	.53	.80	.51	.11	1.95
CALIFORNIA	1.3	3.37	.67	.52	5.86
CANAL ZONE (OBS)	0	0	0	0	0
COLORADO	.12	.24	.05	.09	.5
CONNECTICUT	.04	.09	0	.05	.18
DELAWARE	.01	.02	0	0	.03
DIS. OF COLUMBIA	.15	.09	.17	.01	.42
FLORIDA	5.46	5.50	2.19	2.05	15.2
GEORGIA	1.71	2.58	.78	.82	5.89
GUAM	.12	.24	.05	.02	.43
HAWAII	.06	.04	.02	0	.12
IDAHO	.27	.28	.05	. 24	.84
ILLINOIS	.25	.48	.04	.07	.84
INDIANA	.17	.54	.04	.20	.95
IOWA	.01	.02	.01	.02	.06
KANSAS	.09	.38	.02	.05	.54
KENTUCKY	.73	.73	.47	.39	2.32
LOUISIANA	.83	1.53	.35	.26	2.97

TABLE 7 - CONTINUED

HOME OF RECORD FOR NAVY JROTC GRADUATES WHO ENLISTED IN THE MILITARY BY SERVICE (PEPCENT),
FISCAL YEARS 1977 - 1986

		EARS 197		· · · · · · · · · · · · · · · · · · ·	
STATE	ARMY	NAVY	MARINES	AIR FORCE	TOTAL
MAINE	0	.01	0	0	.01
MARYLAND	.61	.31	.41	.11	1.44
MASSACHUSETTS	.19	.24	.08	.11	.62
MICHIGAN	.17	.43	.01	.07	.68
MINNESOTA	.26	.47	.14	.08	.95
MISSISSIPPI	1.16	1.48	.20	.40	3.24
MISSOURI	.26	.45	.12	.12	.95
MONTANA	.06	.20	.26	.13	.65
NEBRASKA	.01	.04	0	0	.05
NEVADA	.46	.52	.17	.18	1.33
NEW HAMPSHIRE	.12	.17	.02	.17	.48
NEW JERSEY	.22	.79	.21	.31	1.53
NEW MEXICO	.52	1.29	.26	.30	2.37
NEW YORK	.22	.66	.15	.19	1.22
NOPTH CAROLINA	3.23	1.61	1.04	.91	6.79
NORTH DAKOTA	0	.02	0	0	.02
OHIO	.82	.89	.37	.12	2.2
OKLAHOMA	.07	.19	0	.01	.27
OREGON	.01	.07	0	.01	.09
PENNSYLVANIA	.17	1.73	.09	.38	2.37
PUERTO RICO	.01	.01	0	0	.02
RHODE ISLAND	.33	.13	.13	.09	.68

TABLE 7 - CONTINUED

HOME OF RECORD FOR NAVY JROTC GRADUATES WHO ENLISTED
IN THE MILITARY BY SERVICE (PEPCENT),
FISCAL YEARS 1977 - 1986

STATE	ARMY	NAVY	MARINES	AIR FORCE	TOTAL
SOUTH CAROLINA	2.02	3.05	.65	.99	5.71
SOUTH DAKOTA	.01	.05	0	0	.06
TENNESSEE	.79	1.15	.20	.15	2.29
TEXAS	2.33	3.44	1.42	.92	8.11
UTAH	.05	.22	.05	.12	.44
VERMONT	0	.04	0	.01	•05
VIRGINIA	4.07	2.20	1.43	1.39	9.09
VIRGIN ISLANDS	0	.05	0	0	.05
WASHINGTON	.48	.51	.24	.12	1.35
WEST VIRGINIA	O	.05	.02	0	.07
WISCONSIN	0	.18	.02	0	.20
WYOMING	.06	.18	.02	.06	.32

SOURCE: DEFENSE MANPOWER DATA CENTER, NOVEMBER 1987

62 percent, with blacks and Hispanics following at 20 percent and 15 percent, respectively. These percentages are the same for males, while there are five percent more black women and six percent less white women. Twenty-seven percent of white male JROTC graduates enlist in the Navy, while 19 percent black males and 18 percent Hispanic males

enter the Navy. Twenty-two percent of the white female JROTC graduates enlist in the Navy, while 18 percent and 16 percent of the black and Hispanic females, respectively, enter the Navy.

Of those JROTC graduates enlisting in the Navy, 47 percent fall into AFQT categories I through IIIa, with another 31 percent falling in AFOT category IIIb and 14 percent falling in AFQT category IVa. Eighty-nine percent of the female enlistees have entrance scores in categories I through IIIb, whereas only 77 percent of the male enlistees fall in these same categories. Looking at the AFQT levels of Navy JROTC graduates, 47 percent fall in categories I through IIIa, 31 percent in category IIIb, and 13 percent in category IVa. Only the Air Force gets a higher percentage of AFQT category I through IIIa JROTC program graduates, at 53 percent. The Navy JROTC graduates who have entrance test scores in AFOT categories I through IIIa and eventually enlist do so at a rate of 45 percent into the Navy, 26 percent into the Army, 16 percent into the Air Force, and 13 percent into the Marines.

White males who score in AFQT categories I through IIIa do so at 58 percent, while the same categories of black and Hispanic males are 25 percent and 15 percent, respectively. White women in categories I through IIIa total 60 percent, compared with 44 percent of black women and 21 percent of Hispanic women.

Eighty-eight percent of the males completed high school, compared with 93 percent of women. These figures are the same for Navy JROTC graduates. White women are at 92 percent with black and Hispanic women at 94 percent. For Navy JROTC graduates, white women increase to 94 percent with black women at 93 percent and Hispanic women at 96 percent completing high school (as their highest year of education).

B. SEPARATIONS DATA

A separation is an any service JROTC program graduate who enlisted into any active duty branch of military service and was released from active duty any fiscal year between fiscal year 1977 and fiscal year 1986, inclusive. This data exhibits results that reflect what happened to earlier fiscal year cohorts because later fiscal year cohorts (e.g., fiscal year 1986) have only been in the military for two years and are still on active duty.

The number of separations in this sample can be found in Table 8. While 24.1 percent of all separations, by JROTC graduates are from the Navy, only 14.5 percent of these individuals were graduates of Navy JROTC programs.

Of these 4,257 separations, 51 percent were due to expiration of term of services; 31 percent were due to failure to meet minimum behavioral and performance criteria (such as drugs, financial irresponsibility); 7 percent were

due to medical disqualifications; 7 percent were other separations or discharges; and 2 percent were entered into officer commissioning programs. Eighty-two percent of these separations occurred at four or less years of service, while 44 percent occurred with between four and seven years of service. The greatest percentage of separations, 29 percent, occurred at the four-year point, and the second greatest, 22 percent, occurred at the one-year point. For those separations at the one-and two-year points, 59 percent were due to failer to meet minimum behavioral and performance criteria.

It is interesting to note that 73 percent of the separations discussed above were honorable, 10 percent were under honorable conditions, and 7 percent were under other than honorable conditions. This was the same for all JROTC graduates regardless of their JROTC program.

The Navy JROTC graduates who separated from the military, regardless of branch of service, did so at the proportions of 69 percent being white, 19 percent were Hispanic, and 10 percent were black.

Among the different branches of service, the Navy had the highest percentage of whites who separated, as 47 percent left the service. The Army followed with 25 percent of its whites leaving. However, the Army had larger percentages of Hispanics and blacks who separated as 46 percent of the Hispanics and 39 percent of the blacks were

TABLE 8

TOTAL NUMBER OF ALL SERVICES JROTC GRADUATES
WHO SEPARATED FROM ACTIVE DUTY MILITARY SERVICES
BY SERVICE, FISCAL YEARS 1977-1986

	DEKATCE, I	LOCAL IL	11/2 17/1	1900	
	ARMY	NAVY	MARINES	AIR FORCE	TOTAL
ARMY JROTC % ROW % COLUMN %	9,446 (32.17) (53.60) (71.58)	3,633 (12.37) (20.61) (51.34)	2,700 (9.19) (15.32) (47.99)	1,845 (6.28) (10.47) (53.22)	17,624 (100) (60.01)
NAVY JROTC % ROW % COLUMN %	1,301 (4.43) (30.56) (9.86)	1,838 (6.26) (43.18) (25.97)	541 (1.84) (12.71) (9.62)	577 (1.96) (13.55) (16.64)	4,257 (100) (14.50)
MARINES JROTC % ROW % COLUMN %	288 (.98) (25.33) (2.18)	233 (.79) (20.49) (3.29)	151 (.51) (13.28) (2.68)	465 (1.58) (40.90 (13.41)	1,137 (100) (3.87)
AIR FORCE % ROW % COLUMN %	2,162 (7.36) (34.05) (16.38)	1,373 (4.68) (21.63) (19.4)	2,234 (7.61) (35.19) (39.71)	580 (1.98) (9.13) (16.73)	6,349 (100) (21.62)
ROIJ %	(44.94)	(24.1)	(19.16)	(11.80)	(100)
TOTAL	13,197	7,077	5,626	3,467	29,367
COLUMN %	(100)	(100)	(100)	(100)	(100)

SOURCE: DEFENSE MANPOWER DATA CENTER, OCTOBER 1987

out of the military. The Hispanics and blacks who left the Navy, did so almost at equal proportions. Thirty-three percent of the Hispanics and 31 percent of the blacks separated from the Navy.

Out of all separations, 91 percent were men and 9 percent were women. The majority of these men and women separated from

the Navy. Forty-three percent of the males and 41 percent of the females were separated from the Navy.

Table 9 lists the proportions of Navy JROTC graduates within certain occupational areas as well as the non-occupational area. A non-occupational area includes patients and prisoners, students and trainees, and undesignated occupations. While the largest proportions, 24.48 percent, is in the non-occupational area, 19.56 percent is in the electrical/mechanical equipment repairs. Only 6.73 percent of the Navy JROTC graduates separated while in the electronics occupational area. This could be a signal to Navy JROTC program managers that there is a need to establish units with more technical courses.

TABLE 9 PERCENT OF NAVY JROTC GRADUATES SEPARATED FROM ACTIVE DUTY MILITARY SERVICE BY OCCUPATIONAL AREA, FISCAL YEARS 1977 - 1986 OCCUPATIONAL AREA INFANTRY, GUN CREWS, AND SEAMANSHIP 15.1 SPECIALISTS ELECTRONIC EQUIPMENT REPAIRERS 6.7 COMMUNICATIONS AND INTELLIGENCE 8.4 SPECIALISTS MEDICAL AND DENTAL SPECIALISTS 4.1 OTHER TECHNICAL AND ALLIED 1.3 SPECIALISTS FUNCTIONAL SUPPORT AND ADMINISTRATION 9.1 ELECTRICAL/MECHANICAL EQUIPMENT 19.6 REPAIRERS CRAFTSMEN 3.2 SERVICE AND SUPPLY HANDLERS 8.0 NON-OCCUPATIONAL 24.5 100.0 TOTAL SOURCE: DEFENSE MANPOWER DATA CENTER, OCTOBER 1987

IV. SUMMARY AND RECOMMENDATIONS

A. SUMMARY

It has been found that the Navy JROTC program falls short in one of it sgoals of providing the military with accessions in the area of active duty enlistments. It was also found that, while only 41 percent of Navy JROTC graduates enter the Navy, 32 percent enlist in the Army. Fortheight percent of those JROTC graduates who enlist in the Navy were graduates of the Army JROTC program while only 27 percent were Navy JROTC graduates. While the Navy holds only a 16 percent share of the JROTC units, second only to the Marines in fewest units, it manages to attract a 23 percent share of the total, all services JROTC program graduates.

Depending on what variables are used when performing a cost-benefit analysis, different results can be obtained. The survey data presently used by Navy JROTC program managers may give misleading results to this type of analysis.

An analysis of Home of Record data files can be of some help to program managers as this research has proven. States than produce low accession figures can be used for identifying units with problems that might exist. Iowa and West Virginia, with two of the lowest accession figures, are possible examples of this. The data are invaluable to the

Navy JROTC program manager who must find ways to efficiently make budget cuts. States with accessions from other JROTC units into the Navy, such as Georgia and South Carolina might produce more Navy accessions if more Navy JROTC units are established in these states.

The analysis also produced evidence that the AFQT levels of Navy JROTC graduates were actually lower than the levels of other enlisted accessions. 11 Another alarming find was that 31 percent of those Navy JROTC graduates who had separated from the military, did so by failing to meet "minimum behavioral and performance criteria."

B. RECOMMENDATIONS

It is recommended that the methods of analysis used in this thesis be used by the Navy JROTC program managers for keeping track of Navy JROTC graduate accessions. By using these methods, a more accurate cost benefit analysis can be performed and performances of JROTC units can be more closely monitored. From the occupational area data analyzed, it seems more emphasis needs to be placed on technical careers. A better job of recruiting by Navy JROTC unit commanders also could help.

C. FUTURE RESEARCH

Possible future research could entail developing a questionnaire and having a survey taken of Navy JROTC graduates as to why they did or did not enlist in the branch

of service of their IROTC unit. A regression analysis could also be performed using the variables from the survey and determining an equation for predicting military accessions of Navy JROTC graduates.

A cost-benefit analysis between the Navy JROTC program and other types of programs (e.g., sea cadets) could be researched. A cost benefit analysis between the different recruiting programs and the Navy JROTC could also be done.

Research could be performed in the area of military performance. An analyst could compare the military performance records and characteristics of JROTC graduates (by and across services) with non-JROTC graduates. This could show that JROTC graduates are better performers. The results of this research could have a large effect on any cost-benefit analysis performed.

FILE NAME:
RECORD LENGTH: 195

COLUMN	DESCRIPTION	COLUMN	DESCRIPTION
1.		51.	BLOOD PRESSURE - DIASTOLIC
2.		52.	MEDICAL 1
3.	SOCIAL SECURITY NUMBER	53.	FAILURE 2
4.		54.	CODES 3
5.	CENSUS Region	55.	WAIVER
6.	District	56.	WAIVER APPROVAL LEVEL
7.	HOME OF First 3 digits	57.	EXAMINATION STATUS
8.	RECORD	58.	Y
9.	ZIP CODE Last 3 digits	59.	M DATE OF ENTRY
10.	HOME OF RECORD	60.	D
11.	Y DATE OF DETERMINATION	61.	TERM OF ENLISTMENT
12.	M	62.	ENTRY PAY GRADE
13.	Y	63.	
14.	M DATE OF BIRTH	64.	HOME OF RECORD COUNTY FIPS
15.	D D	65.	
16.	AGE AT ENTRY	66.	PROGRAM
17.	RECORD IDENTIFICATION	67.	ENLISTED
18.	HYEC	68.	FOR
19.	SEX	69.	
20.	RACE	70.	RESERVED
21.	ETHNIC	71.	TRESOURCE DE LA CONTRACTOR DE LA CONTRAC
22.	RACE ETHNIC	72.	AFEES STATION/MEPS
23.	MARITAL STATUS/DEPENDENTS	73.	BONUS OPTION
24.	TEST FORM	74.	ENLISTMENT OPTION
25.	AFOT PERCENTILE	75.	YOUTH PROGRAM
26.	AFOT GROUPS	76.	RESERVED
27.	1	77.	EDUCATION CERTIFICATE
28.	2	78.	TAPE DATE MONTH
29.	3	79.	ORIGINAL AFOT PERCENTILE
30.	<u>3</u>	80.	ORIGINAL AFQT GROUPS
31.	5	81.	CKIGIWAE ALQI GKOOLS
32.	6	82.	TRAINING/ENLISTMENT
33.	7	83.	MOS/AFSC/RATING
34.	8	84.	MOS/ ALSC/ RATING
35.	9	85.	
36.	10	86.	TAFMS
37.	11	87.	1
38.	11	88.	DPOC
39.	SERVICE OF ACCESSION	89.	1
40.	PRIOR SERVICE	90.	DDOC
41.	PUL PUL	91.	1
42.	HES	92.	HYEC 1
43.	APTITUDE 13	93.	PAYGRADE 1
44.	AREA 14	94.	SERVICE 1
45.	SCORES 15	95.	MARITAL STATUS 1
	15 16	96.	NUMBER OF DEPENDENTS 1
46.	ENTRY STATUS	97.	NOMBER OF DEPENDENTS I
47.	HEIGHT	98.	SPN/SPD 1
48.			SPN/SPD 1
49.	WEIGHT BLOOD PRESSURE - SYSTOLIC	99.	ISC 1
50.	BLOOD PRESSURE - SISTULIC	100.	1 1

COLUMN	DESCRIPTION		COLUMN	DESCRIPTION	
101.	Y		151.	TAFMS	LOSS
102.	M DATE OF SEPARATION		152.	DPOC	
103.	D		153.	FAILURE	LOSS
104.	Y		154.	DDOC	LOSS
105.	M BASD		155.	DDOC	LUSS
106.	D		156.	HYEC	LOSS
107.	Y ETS		157.	PAYGRADE	LOSS
108.	M		158.	SERVICE	LOSS
109.	Y DOLE		159.	MARITAL STATUS	LOSS
110.	M		160.	DEPENDENTS	LOSS
111.	CHARACTER OF SERVICE	1	161.		
112.	ELIGIBILITY TO REENLIST	1	162.	SPN/SPD	LOSS
113.	Y		163.		
114.	M PEBD		164.	ISC	
115.	D		165.	Y	
116.	FILE FLAG	1	166.	11	LOSS
117.			167.	D	
118.	TAFMS	2	168.	Y	
119.			169.	M BASD	LOSS
120.	DPOC	2	170.	D	
121.	B. 66		171.	Y	LOSS
122.	DDOC	2	172.	M ETS	2000
123.	BBGG		173.	Y	LOSS
124.	HYEC	2	174.	M DOLE	2000
125.	PAYGRADE	2	175.	CHARACTER OF SERVICE	LOSS
126.	SERVICE	2	176.	ELIGIBILITY TO REENLIS	ST LO
127.	MARITAL STATUS	2	177.	Y	
128.	NUMBER OF DEPENDENTS	2	178.	M PEBD	LOSS
129.			179.	D	
130.	SPN/SPD	2	180.	FILE FLAG	LOSS
_131.			181.		
132.	ISC		182.		
133.	Y		183.	FILE MATCH	
134.	M DATE OF SEPARATION	2	184.	INDICATORS	
135.	D		185.		
136.			186.	DOE YEAR INTO D.E.P.	
137.	BASD	2	187.	DOE MONTH INTO D.E.P.	
138.			188.	MONTHS IN D.E.P.	
139.	Y ETS	2	189.	SPANISH FLAG MASTER/LO	DSS
140.	M		190.	Y DCPG	
141.	Y DOLE	2	191.	M	
142.	[1]		192.		
143.	CHARACTER OF SERVICE	2	193.	BINARY ZEROS	
144.	ELIGIBILITY TO REENLIST	2	194.		
145.	Y		195.		
146.	M PEBD	2	196.		
147.	D		197.		
148.	FILE FLAG	2	198.		
149.			199.		
50.	TAFMS	LOSS	200.		

TABLE DEFINITION KEY

RACEETH		AFQT SCORE
0 - Undefined 1 - White 2 - Black 3 - Hispanic 4 - American 5 - Asian/Pac 6 - Other/Unk		0 - Undefined 1 - (V) 1-9 2 - (IVc) 10-15 3 - (IVb) 16-20 e 4 - (IVa) 21-30 5 - (IIIB) 31-49 6 - (IIIa) 50-64 7 - (II) 65-92 8 - (I) 93-99
JROTC		
10- JROTC - 3- 11- Army JROTC 12- Navy JROTC 13- Air Force program	C - 3-yr program C - 3-yr program	TOE (Term of Enlistment) YEARS
14- Marine Cro	ops JROTC - 3-yr	
22- Navy JROTO 23- Air Force program	C - 4-yr program C - 4-yr program	ENT PG (Entry Paygrade) 1 - E-1 2 - E-2 3 - E-3 4 - E-4 5 - E-5
SEX	<u>SVC</u> (Service)	HYEC (Highest Year
<pre>1 = Male 2 = Female</pre>	<pre>1 - Army 2 - Navy 3 - Air Force 4 - Marine Corps 5 - Preinductee 8 - Navy</pre>	Education Completed) 2 - 8 years 3 - 1 Year High School 4 - 2 Years High School 5 - 3-4 Years High School (no diploma) 6 - High School Dilpoma 7 - 1 Year College 8 - 2 Years College 9 - 3-4 Years College
AGEENT (Age a	t Entry)	(no degree) 10- College Graduate
YEARS		13- High School G.E.D.

HOR (HOME OF RECORD)

State Codes		
Alabama	AL	01
Alaska	AK	02
American Somoa	AQ	03
Arizona	AZ	04
Arkansas	AR	05
California	CA	06
Canal Zone (obsolete)	PQ	07
Colorado	CO	8 0
Connecticut	CT	09
Delaware	DE	10
District of Columbia	DC	11
Florida	FL	12
Georgia	GA	13
Guam	GQ	14
Hawaii	HI	15
Idaho	ID	16
Illinois	IL	17
Indiana	IN	18
Iowa	IA	19
Kansas	KS	20
Kentucky	KY	21
Louisiana	LA	22

HOR (HOME OF RECORD) (CONTINUED)

State Codes		
Maine	ME	23
Maryland	MD	24
Massachusetts	MA	25
Michigan	MI	26
Minnesota	MN	27
Mississippi	MS	28
Missouri	MO	29
Montana	MT	30
Nebraska	NE(NB)	31
Nevada	NV	32
New Hampshire	NH	33
New Jersey	NJ	34
New Mexico	NM	35
New York	NY	36
North Carolina	NC	37
North Dakota	ND	38
Ohio	ОН	39
Oklahoma	OK	40
Oregon	OR	41
Pennsylvania	OA	42
Puerto Rico	RQ	43
Rhode Island	RI	44

HOR (HOME OF RECORD) (CONTINUED)

State Codes		
South Carolina	SC	45
South Dakota	SD	46
Tennessee	TN	47
Texas	TX	48
Utah	UT	49
Vermont	VT	50
Virginia	VA	51
Virgin Islands	VQ	52
Washington	WA	53
West Virginia	WV	54
Wisconsin	WI	55
Wyoming	WY	56

TABLE C-1

MALE GRADUATES FOR FISCAL YEARS 1977-1986, GROUP AND JROTC PROGRAM GRADUATED FROM 0.04 2.75 3.87 000 000 8888 Civodo 20.00 15.4-23 15.4-33 15.4-33 SERVICES JROTC BY RACE/ETHNIC ALL FREDJENCY PERCENT RODE POT RACEETA

109

28899

31228

9181

1.40

398

0,40

20.03

9

TOFAL

13.18

TARLE C-2

333° 2002 FOR FISCAL YEARS 1977-1986, 060 BY RACE/ETHNIC GROUP AND JROTC PROGRAM GRADUATED FROM 6666 000 666 GRADUATES 000 3.28 3.28 0000 3.52 2.08 19.037 200 32.1 SERVICES JROTC FEMALE 245 = JROTC 8.... ALL > DE 100 PER 1 ø RACEETH TOTAL:

ALL SERVICES JROTC MALE GRADUATES FOR FISCAL YEARS
1977-1986, BY RACE/ETHNIC GROUP AND
BRANCH OF SERVICE ENLISTED INTO

TABLE C-3

RACEETH .	SERVIC	<u>e</u>			,
FREQUENCY PERCENT ROW POT COL POT					
COL PST	I A R M Y	NAVY	JUSAF	JSMC	TOTAL
J	0.07 44.95 0.21	23 25.69 25.23	7 0. 12 8. 26 0. 17	23 0.04 21.13 0.37	137
1	1 3977 21.21 37.96 46.35	7730 15.05 25.94 64.49	6325 13.17 23.52 68.13	3317 6.41 11.43 53.17.	23379 55.85
2	5904 11.41 52.59 25.22	2156 4.17 17.21 17.86	15 23 2 • 35 13 • 51 15 • 26	1638 3.17 14.59 26.26	11225
3	5323 11.25 57.17 24.35	1305 3.49 17.73 14.95	1475 2.35 14.50 14.74	1 183 2.09 10.61 17.31	17131
4	343 0.57 43.14 1.43	153 2.32 22.43 1.35	93 0 • 19 13 • 52 0 • 98	115 0.22 15.36 1.34	725 1.43
5	202 0.39 52.05 0.35	126 20 27.32 2.83	41 0.03 10.57 0.41	39 0.08 10.05 0.63	333 3.75
6	117 0.23 57.07 0.50	29 1.06 14.15 0.24	33 0.05 15.10 0.33	0.05 12.63 0.42	225
TOTAL	23411 45.25	12073 23.34	10011 19.35	6233 12.06	51733 100.00

ALL SERVICES JROTC FEMALE GRADUATES FOR FISCAL YEARS
1977-1986, BY RACE/ETHNIC GROUP AND
BRANCH OF SERVICE ENLISTED INTO

TABLE C-4

					•
RACEETH	SERVIC	<u> </u>			
FREQUENCY PERCENT ROW PST COL PST	AR MY	NAVY	USAF	lusmo	TOTAL:
	10 0.19 71.43 0.37	2. 22 7. 14 2. 10	0.32 7.14 0.39	0.04 14.29 0.53	3.27
1	953 18.44 40.52 35.55	526 12.13 22.25 32.31	532 13.13 23.35 53.59	193 3.81 8.33 57.06	2364 45.51
2	873 16.31 57.85 32.49	256 5.12 17.53 25.71	2 32 5 • 43 1 3 • 59 2 4 • 23	83 1.69 5.83 25.36	1539
3	739 14.23 55.45 27.50	173 3.43 15.77 17.87	1 63 3 • 23 1 4 • 33 1 4 • 43	44 - 0.85 3.90 12.68	1129
4	57 1.12 57.30 2.12	1 ó 7.31 15.70 1.51	15 3.31 15.33 1.37	11 0.21 11.93 3.17	133
5	35 0.67 70.00 1.30	7.73 3.70 7.40	0.15 16.00 0.69	0.06 6.00 0.85	3. 96
6	0.29 53.57 0.56	7.10 17.30 2.50	7 2.13 25.00 0.50	0.02 3.57 0.29	29
TOTAL"	2687 51.73	39 ś. 19.18	1154 22.41	347 6.53	5194 100.00

TABLE C-5

ALL SERVICES JROTC MALE GRADUATES FOR FISCAL YEARS 1977-1986, BY JROTC PROGRAM GRADUATED FROM AND BRANCH OF SERVICE ENLISTED INTO

JAOTE	SERVICE				,
FREADENCY PERCENT ROW POT COL POT	ARMY	INAVY	<u> USAF</u>	i na wc	TOTAL
10	179 0.35 43.55 0.76	1 5 3 0 - 320 47 - 330 1 - 39	35 3.75 3.76 3.36	23 0.05 6.81 0.45	411 3.79
11	10949 21.16 53.33 45.77	4273 3.12 22.27 34.31	1523 2.94 8.17 15.21	2194 4.24 11.63 35.17	18359 35.47
1 2	1749 3.33 32.75 7.47	2530 4.59 43.31 21.37	174 3.34 3.25 1.74	333 · 1.62 15.69 13.43	5341 13.32
1 3	32 5 4 6 • 3 1 4 7 • 3 3 1 3 • 9 4	2313 3.20 29.40 15.71	5 5 2 1 • 2 5 9 • 5 5 5 • 5 1	893 1.71 12.95 14.15	6817 13.13
1 4	344 0.05 20.57 1.47	313 2.51 2.53 2.59	71 J.14 5.36 J.71	434 0.94 39.93 7.75	1212 2.34
2)	13 0.05 12.36 0.03	34.29 34.29 3.49	55 1.11 42.14 1.59	15 0.03 10.71 0.24	147 3.27
21	505 0 9.76 47.23 21.57	1621 3.13 15.16 13.43	3732 5.36 28.33 30.29	979 1.39 9.15 15.69	13632
2.2	657 1.27 23.45 2.31	333 1.13 25.23	3 J2 1 • 55 3 4 • 73 3 • J1	267 9.52 11.55 4.23	2309
2 3	975 1.39 19.09 4.17	4 3 4 7 • 4 9 8 • 5 9	3431 5.73 63.39 34.77	221 D.43 4.32 3.54	5112 9.33
2 4	225 0.43 26.79 0.95	105 0.20 12.50 5.37	1 31 2 • 35 21 • 55 1 • 31	329 9.54 39.17 5.27	34J 1.52
TOTAL	23411 45.25	12073 23.34	10011	6233 12.06	51733

TABLE C-6

ALL SERVICES JROTC FEMALE GRADUATES FOR FISCAL YEARS

1977-1986, BY JROTC PROGRAM GRADUATED FROM AND BRANCH OF SERVICE ENLISTED INTO

_					
JROTC .	SERVICE		•		
FREQUENCY PERCENT ROW POT COL POT	ARMY	, TNAVY	USAF	USMC] TOTAL
10	13 0.25 37.14 0.48	16 2.31 45.71 1.51	0.08 - 11.43 0.34	0.04 5.71 0.58	0.57
11	1244 23.95 70.05 46.30	270 5.20 15.20 27.11	175 3.37 9.35 15.33	87 1.53 4.90 25.07	1775 34-19
12	209 4.02 36.99 7.73	275 5.29 43.57 27.61	27 3.52 4.78 2.32	54 1.24 9.56 15.56	13.33
13	404 7.79 55.12 15.04	199 3.93 27.15 19.93	79 1.52 13.73 5.79	0.93 5.96 14.73	733 14.11
14	42 0.31 3d.37 1.55	17 3.33 15.74 1.71	0.10 4.53 0.43	0.35 40.74 12.63	108 2.08
20	0.15 42.11 0.30	15.79 15.30	2.15 42.11 0.59	0.00	3.37
21	566 10.90 54.63 21.06	113 2.18 13.91 11.35	3]4 5 • 35 29 • 34 26 • 12	1.02 5.12 15.27	1036 19.95
22	75 1.44 30.74 2.79	1.19 25.41 5.22	1.34 34.34 7.30	22 9.42 9.02 6.34	244
23	104 2.00 17.39 3.37	37 9.71 5.19 3.71	8 • 55 74 • 25 33 • 14	13 0.25 2.17 3.75	593 11.51
24	0.42 27.50 0.32	7.08 5.00 7.40	33 0.34 41.25 2.34	21 0.40 26.25 6.05	80 1254
TOTAL	2687 51-73	19.18	1154	347 6.68	51 94 1 3 3 2 3 3

TABLE C-7

FRUICES IDOTC MALE CRADUATES FOR FIGURE WAS EXCENT.

ALL SERVICES JROTC MALE GRADUATES FOR FISCAL YEARS 1977-1986, BY AFQT CATEGORY AND BRANCH OF SERVICE ENLISTED INTO

AFQT	SERVICE				,
FREQUENCY PERCENT ROW POT COL POT	AR MY	INAVY	USAF	l nz wc	TOTAL
0	446 0.35 33.53 1.71	273 15.29 1.53	5 01 1 • 15 45 • 25 5 • 00	73 0.15 5.37 1.25	1328 2.57
1	0.39 73.13 0.21	3.02 11.94 0.07	0. 01 4. 43 0. 03	7 0.01 10.45 0.11	J. 13
2	1499 2.93 81.73 6.43	199 3.33 13.35 1.65	0.32 0.55 0.12	124 0.24 6.76 1.99	1334 3.55
3	1745 3.33 57.49 7.46	553 1.07 21.33 4.58	0.11 2.15 3.55	232 0.45 8.97 3.72	25 3 7 5 • 3 3
-	4353 3.44 50.12 13.55	1757 3.40 22.57 14.55	9 30 1 • 50 10 • 65 3 • 27	328 1.60 10.64 -13.27	7733 15.34
5	7114 13.75 43.25 30.39	3591 5.94 21.34 29.74	3219 5 • 22 19 • 37 32 • 15	2521 4.37 15.33 40.41	15445
5	3391 6.55 39.91 14.43	2050 3.90 24.13 16.93	23 35 3 • 38 23 • 53 23 • 33	1050 2.03 12.36 15.33	8475 15.42
7	4135 7.99 36.70 17.57	3110 5.01 27.50 25.70	2311 5.43 24.34 23.33	1212 2.34 10.76 17.43	11257
3	652 1.23 34.41 2.33	602 1.15 31.29 4.99	474 0.92 24.54 4.73	186 0.36 9.67 2.93	1924 3.72
TOTAL	23411 45.25	12373 23.34	13311	6233 12.06	51733 100.00

ALL SERVICES JROTC FEMALE GRADUATES FOR FISCAL YEARS 1977-1986, BY AFQT CATEGORY AND BRANCH OF SERVICE ENLISTED INTO

TABLE C-8

AFQT	SERVICE				
FREQUENCY PERCENT ROW POT COL POT	4R MY	I N A VY	JUSAF	usmc	TOTAL
0	22 0.42 23.40 0.32	21 22.34 2.11	3. 92 51. 35 4. 12'	0.06 3.19 0.86	1.31
1	0.31 100.32 0.50	7.00 7.00 7.00	0.03 3.03 3.03	0.00	0.31
2	93.13 3.31	7.73 4.50 2.40	0.00 0.00 0.00	0.04 2.30 0.53	. 1.53
3	117 2.25 37.97 4.35	0.21 3.27 1.10	2.13 3.75 2.43	0.00	133
4	364 7.31 69.53 13.53	72 1.39 13.77 7.23	1 • 53 1 • 53 1 • 63 7 • 47	0.00 0.00 0.00	12-37
5	1921 19.55 52.71 38.00	446 9.59 23.03 44.78	417 7.99 21.17 35.22	60 1.16 3.10 17.29	1937 37.29
6	567 11.33 47.34 21.35	199 3.33 15.35 19.98	3 36 5 • 37 24 • '53 26 • 29	143 2.85 11.94 42.65	1240
7	457 8-65 42-37 16-75	220 4.24 20.72 22.09	277 5•33 26•38 23•30	115 2.21 10.83 33.14	1752
3	29 0.55 28.47 1.38	23 2.44 22.55 2.31	31 3.50 33.37 2.65	19 0.37 13.63 5.48	102
TOTAL	2637 51.73	17.13	1154 22.41	347 6.63	5194 100.00

NAVY JROTC MALE GRADUATES FOR FISCAL YEARS 1977-1986,
BY RACE/ETHNIC GROUP AND
JROTC PROGRAM GRADUATED FROM

TABLE D-1

RACEETH	JROTC.		
FREQUENCY PERCENT ROW PCT COL PCT			
COL PCT	12	22	TOTAL.
0	3.10 05.57 3.15	3.05 33.33 0.17	0.15
1	3295 43.07 68.25 61.69	1533 20.04 31.75 65.39	4328 63.11.
	1041 13.61 63.30 12.49	472 5.17 31.20 20.44	1513 19.78
- 3	380 11.50 77.53 15.48	2 55 3 • 33 22 • 47 11 • 04	1135
. 4	5 6 0 . 73 73 . 58 1 . 05	20 0.25 26.32 0.37	75 0.99
· 5	46 0.50 77.97 0.86	13 2.17 22.33 3.55	0.77
5	15 3.20 55.56 3.28	12 3.16 44.44 3.52	27
TOTAL	5341 69.32	23) 9 30 • 18	7653 100.00

TABLE D-2

NAVY JROTC FEMALE GRADUATES FOR FISCAL YEARS 1977-1986, BY RACE/ETHNIC GROUP AND JROTC PROGRAM GRADUATED FROM

RACEETH	JROTE		
FREQUENCY PERCENT ROW PCT COL PCT			
COL PCT	12	22	TOTAL
÷ 3	7.12 53.30 3.13	53.00 53.41	0.25
1	310 33.32 63.43 54.37	1 43 17.58 31.57 53.61	453 56.00
2	149 13.42 71.53 25.37	7.29 23.37 24.13	208 25 . 71
3	92 11.37 72.44 15.23	4.33 27.55 14.34	127 15.70
4	· 10 1.24 71.43 1.77	0.49 23.37 1.54	1.73
. 5). 0 0 0 0	1 00 - 00 1 00 - 00 0 - 41	0.12
5	0.37 75.30 0.53	0 · 12 25 · 03 0 · 41	0.49
TOTAL	5 5 5 69 • 3 4	2 44 30 . 15	100.00

NAVY JROTC MALE GRADUATES FOR FISCAL YEARS 1977-1986, BY RACE/ETHNIC GROUP AND

TABLE D-3

BRANCH OF SERVICE ENLISTED INTO

RACEET	u.	SERVIC	:			,
		254476	<u>-</u>			
FREGUE PERCE ROW PI	VCY VT CT				• •	
COL P	5 T 	1844	NAVY	USAF	USMC	TOTAL
	0	0.00	0.10 65.57 0.25	0.33 15.57 3.20	0.03 16.67 0.1d	3.13
	1	1254 10.52 20.13 52.54	2227 29.11 45.13 70.41	7 14 9 • 20 14 • 53 72 • 13	533 8.27 13.11 57.29	4323 53.11
	2	513 8.02 40.35 23.57	454 5.37 33.57 14.57	1 43 1 37 9 45 1 1 4 55	233 3.75 19.04 25.05	1513 19.73
	3	435 6.34 ,42.73 20.16	371 4.85 32.59 11.73	1 14 1 . 45 1 J . 14 1 1 . 53	165 2.16 14.54 14.93	1135 14.34
	4	15 0.21 21.35 0.57	3.5d 57.39 1.39	7.12 13.53 2.32	0.13 10.53 10.72	75 3.77
	3	15 0.21 27.12 0.67	7.70 64.41 1.20	0.33 3.39 0.20	3 0.04 5.08 0.27	3.77
	5	7 0.19 25.93 0.29	11 2.14 42.74 2.35	3.34 11.11 2.31	0.08 22.22 0.54	27 3.35
TOTAL	,	2405 31.45	31 5 3 41 • 3 5	976 12.75	1105	7650 100.00

NAVY JROTC FEMALE GRADUATES FOR FISCAL YEARS 1977-1986,

BY RACE/ETHNIC GROUP AND

BRANCH OF SERVICE ENLISTED INTO

TABLE D-4

	RACE ET4	SERVIC	٤			
	FREQUENCY PERCENT ROW POT COL POT	42 MY] N A VY	USAF.	usmc]. TOTAL
	, _, 0	0.25 100.33 0.73	7.20 7.20 7.20	0.07 0.07 0.07	0.00 0.00 0.00	J. 25
	1	126 15.57 27.51 44.37	203 25.71 45.92 61.72	74 9.15 15.34 65.37	45 5.56 9.93 59.21	55.30
	2	92 11.37 44.23 32.39	73 7.10 35.10 21.56	2.97 11.54 21.43	19 2.35 9.13 25.00	238 25.71
	3	62 7.55 43.52 21.33	4 4 5 • 4 4 34 • 5 5 13 • 9 6	13 1.51 13.24 11.51	0.99 5.30 10.53	127 15.70
	. 4	0.25 14.23 0.73	9.23 57.14 2.37	0.09 0.09 0.09	0.49 29.57 5.26	1.73
,	5 .	0.00 0.00 0.00	7.70 7.70 7.70	1 0 • 12 100 • 07 0 • 39	0 0 0 0 0 0 0	0.12
•	5	0.00 0.00 0.00	103.36 103.36	0.00 0.00 0.00	0.00 0.00 0.00	0.49
	FOTAL	234 35.11	337 41.50	112 13.34	76 9.39	809 100.00

TABLE D-5

NAVY JROTC MALE GRADUATES FOR FISCAL YEARS 1977-1986, BY JROTC PROGRAM GRADUATED FROM AND BRANCH OF SERVICE ENLISTED INTO

		TOTAL'	5341 69.82	3 3. 18	7650
`.		l usmc	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		110
		i	13:51 13:51	104~-	10
		>> Z			1 K T
SERVICE		ARMY	22.85 32.75 72.63		240
JROTC'	FREGUENCY PERCENT ROW PCT	OL PC		2 2 .	0

TABLE D-6

NAVY JROTC FEMALE GRADUATES FOR FISCAL YEARS 1977-1986, BY JROTC PROGRAM GRADUATED FROM AND BRANCH OF SERVICE ENLISTED INTO

		TOTAL	565	30.16	8 3 9 1 0 0 1 0 0
ï		I DWC I	7967		
		USAF	1	1 3 7 5	
	• 1		ス・・・ ス・・・ からなん	1 ~100	337
SERVICE		ARMY	0.000 0.000 0.000	000	5.1 Σ.1
JROTC	PREGENCE POLICY	OL PC		. 25.	TOTAL

4

TABLE D-7

NAVY JROTC MALE GRADUATES FOR FISCAL YEARS 1977-1986,
BY AFQT CATEGORY AND
BRANCH OF SERVICE ENLISTED INTO

AFQT	SERVICE	**			,
FREQUENCY PERCENT ROW POT COL POT				••	
LOL PUI	ARMY	NAVY		USMC	TOTAL
,	0.555 23.577	36.07 2.09	52 3.31 33.88 5.35	12 0.15 6.56 1.09	183 2.39
. 1	0. J4 42. 36 0. 12	2.03 28.57 2.05	1 0.01 14.29 0.10	0.01 14.29 0.09	3. 39
2	151 1.97 68.95 6.23	21.46 1.49	2.01 2.46 2.10	20 0.26 9.13 1.81	219
3	157 2.05 49.06 6.53	120 1.57 37.50 3.79	13 . 0.17 4.26 1.33	30 0.39 9.33 2.71	320 4-15
4	- 403 5.33 40.20 10.95	405 5.29 39.30 12.30	71 0.73 7.00 7.27	131 1.71 12.91 11.86	1015 13.27
5	749 9.57 31.22 30.75	973 11.30 33.10 23.55	2 33 3 . 70 11 . 94 29 . 00	444 5.80 18.73 40.13	2373 33.98
6	364 4.75 26.32 15.13	577 7•54 42•52 13•24	1 98 2 • 59 1 4 • 59 2 0 • 29	218 2.85 16.06 19.73	1357 17.74
7	460 6.01 24.77 19.12	378 11.48 47.23 27.76	2 97 3 • 38 15 • 99 30 • 43	222 2.90 11.95 20.09	1357
8	1.05 24.84 3.33	165 2 • 16 51 • 24 5 • 22 3163 41 • 35	50 0.65 15.53 5.12	27 0.35 8.39 2.44	322 4.21
TOTAL	2406 31.45	3153 41.35	9 75 1 2 • 75	1105	7650 100.00

TABLE D-8

NAVY JROTC FEMALE GRADUATES FOR FISCAL YEARS 1977-1986,
BY AFQT CATEGORY AND
BRANCH OF SERVICE ENLISTED INTO

AFRT	SERVICE				
FREQUENCY PERCENT ROW POT COL PCT	4RMY	NAVY	USAF	l us mc	TOTAL
· 0	0.52 21.74 1.76	13 1.51 55.52 3.30	3.52 21.74 4.46	0.00 0.00 0.00	2.34
1	0.12 100.00 100.35	7. 00 7. 00 7. 00 7. 00	0.00 0.00 0.00	9.00 9.00 9.00	J. 12
2	7 0.37 100.00 2.45	 	0. n 0. n 0. 00 0. 00	7.00 0.00 7.00	7 3.87
3	0.93 50.57 2.82	3.49 33.33 1.19	0.00 0.00 0.00 0.00	0.00 7.00 0.00	1.43
4	25 3.21 .44.07 9.15	3. 59 42. 37 7. 42	7.93 13.55 7.14	0.00	7.29
5	12.24 37.22 34.35	124 15.33 45.62 35.80	3.34 10.15 24.11	1.98 1.98 5.02 21.05	265 32.88
5	71 8.73 33.02 25.00	75 7.27 34.38 22.26	4.37 17.21 33.34	32 3.96 14.83 42.11	215 25.53
7	7.54 30.35 21.48	37 10.75 42.36 25.82	30 3.71 14.73 26.79	25 3.09 12.32 32.89	233
8	0.74 20.09 2.11	1.11 39.13 2.67	3 • 52 21 • 74 4 • 45	0.37 13.04 3.95	23 22 84
TOTAL	234 35.11	337 41.56	112' 13.34	75 9.39	309 100.00

TABLE E-1

ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY BRANCH OF SERVICE ENLISTED INTO AND JROTC PROGRAM GRADUATED FROM

JROTE

J S Y S C E

	3238	22.69	15.44	11.66	103.00
	0 62		00.22	0.00 4 0.00 4 0.00 6 0.00 6 0.	2.16
28.6	200	040	WAG		9.01.
	NO-20	2 6 7 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 1000	0000 0000 0000 0000	332
112	22.012 53.001	24.7 20.20 2.03.20 2.0	20 20 20 20 20 20 20 20 20 20 20 20 20 2	13 13 13 13 13 13 13 13 13 13 13 13 13 1	21.03
201	22.22	29.55	-NO.	0-03	3. (2
25	28 9 5 C	21.29	5.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00	36.73	2.40
131	7.10	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	10.547		14.61
	35.05.0	235.2	CVIN 1		9.75
=	\$2.50 \$2.50 \$2.50 \$2.50	52.57 21.72	13.133	23.22	34.13
101	3000 3000 3000	52.75	000 000 000 000	900	0.53
A LID DESC DESC DESC DESC DESC DESC DESC DES	1 1 1 1 1 1 2 1 2 1 7		JS A F	DF:ST	FOTAL

TABLE E-2

TERM OF ENLISTMENT FOR ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986

CUMULATIVE PERCENT	00000000000000000000000000000000000000
MUL ATIV	10000 100000
PERCENT	M200020
FREQUENCY	
TOE	

TABLE E-3

ENTERING PAYGRADE FOR ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986

CUMULATIVE PERCENT	0.00 0.00 0.00 0.00
IVE NCY	2440 64424 64424 64454 64454
PERCENT	647-20 61-52 61-52 61-52
FREQUENCY	1751 3967 18
ENT_PG	-0n4n

TABLE E-4

ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY SEX AND BRANCH OF SERVICE ENLISTED INTO

	TOTAL	93:15	9 6 8 8 5 8 5	103.00
	l usm c	97.17		150
		1 1 1 8 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9	NOM	10.
		1 220	3403	651
SERVICE		• • • 0 00 00 00 00	032	323
SEX	FREQUENCY ROW PCT COL PCT		N.	TOTAL

TABLE E-5

ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986,
BY RACE/ETHNIC GROUP AND BRANCH OF SERVICE ENLISTED INTO

RACEETH	SERVICE	•			
FREQUENCY PERCENT ROW PCT COL PCT					
COL PCT	ARMY	NAVY	USAF	USMC	TATAL
1	1553 24.08 45.96 47.96	821 12.73 24.30 56.12	639 9-44 18-32 61-14	396 6.14 11.72 52.66	3379 52.40
2	1437 22.28 56.24 44.38	519 8.05 20.31 35.48	333 5.16 13.33 33.43	266 4.12 10.41 35.37	2555 37.62
3	132 2.05 42.36 4.03	1.33 27.92 5.38	25 0.39 8.12 2.51	65 1.01 21.10 3.64	303 4.78
4	0.23 50.00 0.46	9 9.14 30.00 0.62	0.33 6.57 0.20	0.06 13.33 0.53	3.47
5	72 1.12 62.61 2.22	0.34 19.13 1.50	0.22 12.17 1.41	7 0.11 6.09 0.93	115 1.78
6	29 0.45 45.77 0.90	0.09 9.53 0.41	13 0 - 20 20 - 77 1 - 31	14 0.22 22.58 1.86).96
TOTAL .	3238 50.21	1463 22.69	996 15.44	752 11.66	5449 103 - 00

TABLE E-6

ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY RACE/ETHNIC GROUP AND AFQT CATEGORY

AFQT

RACEETH

TOTAL	3379	39.62	308	0.47	1.78	96°0	100,00
	2.50 2.50 89.94	300		020		DON	12.
~	1 80004	4-50	- *	1 - W-4	M400		60 100 100
9	65 62 62	8 0 0 0 0 0 0	1 -22	1 -00	0043	-2-0	52
5	2007	1 - M&A 1 4		1 0 - 1	4000	1 WV WV	67
7	10000	12000		CAN	100	0%2	W .
		000		000	050	000	0
10			1				
PRESCUENCY POW PCT	-	2	m -	•	10	•0	TOTAL

TABLE E-7

ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY SEX AND AFOT CATEGORY

SEX

TOTAL	5814	9 . 85	100-00
	2 - 59 2 - 59 2 - 87 9 3 - 30		179
2		180 2 79 10 59	1699
1	20-33 22-55 85-75	3.21 14.31 14.31 14.53	23.71
	3 2 4 4 9 4 9 4 9 4 9 4 9 4 9 4 9 4 9 4 9	NOWN	2670
7	5 3 50 9 6 1 1 9 6 1 1 7 9 6 1 1 7 9 6 1 1 7 9 6 1 1 7 9 6 1 1 7 9 6 1 1 7 9 9 1 1 7 9 1 1 1 1 1 1 1 1 1 1 1	0.03	353
. 3	100.003	0000	0.03
0	ı ∞ı	-	0.11
FREQUENCY PERCENT ROW PCT COL PCT		2	TOTAL

TABLE E-8

ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY SEX AND RACE/ETHNIC GROUP

TOTAL	581	9 63	100.00
<u>,</u>	8 3 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	3 11 29	3,96
<u>18</u>	8 2 6 4 7 5 6 1 6 4 7 5 6 1 6 4 7 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6	1 3 3 3 3 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3	115
7	86 00 55 50 55 50 55	0.05 0.53 13.33	30
m	279 4.33 4.80 90.58	6 6 6 6 7 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8	30g 4.78
	34.633 34.633 37.40		2555
RACEETH	3126 53.77 92.51	2 53 3 9 84 7 49	です
FRESUENCY PERCENTY COL PCT		2	TOTAL

50

TABLE E-9

ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986,
BY HIGHEST YEAR OF EDUCATION COMPLETED AND
BRANCH OF SERVICE ENLISTED INTO

HYEC	SERVICE				
FREQUENCY PERCENT ROW PCT COL PCT	ARMY	INAVY	JUSAF	USM C	TOTAL
2	0.00 0.00 0.00	0.52 100.00 0.07	0.00 0.00 0.00	0.00	3.02
	0.03 16.67 0.06	10 0.15 83.33 0.58	0.30 0.30 0.00	0.00	J. 19
4	21 0.33 51.22 0.65	13 0.28 43.90 1.23	0.00 0.00 0.00	0.03 4.88 0.27	3.64
5	42 0.65 47.19 1.30	0.60 43.32 2.67	0.32 1.12 0.10	7 0.11 7.87 0.93	1.33
6	3062 47.43 50.92 94.56	1291 20.02 21.47 88.24	936 14.51 15.57 93.98	724 11.23 12.04 95.28	5013 93.24
7	35 0.54 36.08 1.08	0.37 24.74 1.64	0.40 26.30 2.51	12 0.19 12.37 1.60	97 1.50
8	22 0.34 40.00 0.68	16 0.25 29.09 1.09	17 0.26 30.91 1.71	0.00 0.00	J. 85
9	0.12 40.00 0.25	0.09 30.03 0.41	0.35 15.30 0.30	0.05 15.00 0.40).31
10	14 0.22 40.00 0.43	0.12 22.35 0.55	0.14 25.71 0.70	0.06 11.43 0.53	35 3.54
13	32 0.50 37.21 0.99	, 0.78 0.78 58.14 3.42	0.36 4.55 0.40	0.00 0.00 0.00	1.33
TOTAL	3238 50.21	1463 22.69	996 15.44	752 11.66	103.00

ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY HIGHEST YEAR OF EDUCATION COMPLETED AND RACE/ETHNIC GROUP

HYEC	RACEETH						
FREQUENCY PERCENT ROW PCT COL PCT	1	L	- 1 3	14	<u> </u>	16	1 TOTAL
2	0 • 00 0 • 00 0 • 00	0.00 0.00 0.00	100.02	0.30 0.30 0.30	0.00	3.00 3.00	0.02
3	7 0-11 58-33 0-21	0.06 33.33 0.16	0.02 8.33 0.32	0.30	0.00 0.00	0 0 0 0 0 0 0 0 0	0.19
4	38 0.59 92.68 1.12	0.03 4.88 0.08	0.32 2.44 0.32	0.30 0.30	0.00 0.00	2 00 2 00 3 00	0-64
5	0.99 71.91 1.39	19 0.23 20.22 0.70	7 0.11 7.37 2.27	0.70 0.70 0.70	0.00	3.00 3.00 00 00	1.38
6	30 78 47 • 73 51 • 19 91 • 39	2455 35.07 40.33	279 4.33 4.54 90.58	30 0 • 47 0 • 50 100 • 30	112 1.74 1.86 77.39	59 7.91 7.98 95.16	6013 93.24
7	3.93 61.36 1.78	0-54 30-08 1-37	0.02 1.03 0.32	0.00 0.00 0.00	0.00 0.00 0.00	7 - 02 1 - 03 1 - 61	1.50
.∱ 3	0.51 60.00 0.8	0-22 25-45 0-55	0.09 10.71 1.05	0.33	0.02 1.82 0.87] • 02 1 • 32 1 • 61	0.85
Q	0.19 60.00 0.30	0.12 40.00 0.31	0.000	0.30 0.30 0.30	0.00	. 3.00	0.31
10	0.34 62.56 0.65	D.14 25.71 0.35	0.96 11.43 1.30	0.00 0.00 0.00	0.00	00 00 00 00 00 00	0.54
13	65 1.01 75.58 1.92	10 0.16 11.63 0.39	0.12 9.30 2.50	0.00	0.03 2.33 1.74	J. 02 1. 16 1. 61	1.33
TOTAL .	3379 52.40	2555 39.62	308 4.78	0.47	115 1.78	62 3.96	6449

ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY HIGHEST YEAR OF EDUCATION COMPLETED AND SEX

HYEC	SEX		
FREQUENCY PERCENT ROW PCT COL PCT	1	2	TOTAL
2	0.02 100.00 0.02	0.00 0.00 0.00	0.02
3	12 0.19 100.00 0.21	0.00 0.00 0.00	0.19
4	41 0.54 100.30 0.71	0.00 0.00 0.00	0.64
5	1.38 1.38 1.00.00 1.53	0.00 0.00 0.00	1.38
, 5	5475 83.81 89.39 92.97	608 9.43 10.11 95.75	6313 93.24
7	1.30 86.50 1.44	13 0.20 13.40 2.35	97 1.50
8	43 0.74 87.27 0.33	7 0.11 12.73 1.10	55 0.85
9	18 0•23 90•30 0•31	0.33 10.30 0.31	0.31
10	31 0.48 88.57 0.53	0.36 11.43 0.53	0.54
13	35 1.32 98.34 1.46	0.32 1.15 0.16	1.33
TOTAL	5814 90 .15	635 9.35	103.00

TABLE E-12

ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY AGE AT ENTRY INTO THE MILITARY AND BRANCH OF SERVICE ENLISTED INTO

AGEENT	SERVICE				•
FREQUENCY PERCENT ROW PCT COL PCT	ARMY	I navy	 I USA F	I USM C	I TOTAL
17	312 4.84 52.44 9.64	140 2.17 23.53 9.57	75 1.16 12.51 7.53	68 1.05 11.43 9.04	595 7.23
18	1463 22.69 50.21 45.13	621 9.63 21.31 42.45	415 6 • 44 14 • 24 41 • 57	415 5.44 14.24 55.19	2914 45.19
19	723 11.29 51.89 22.48	303 4.70 21.60 20.71	216 3.35 15.40 21.59	156 2.42 11.12 20.74	1403 21576
20	332 5.15 49.92 10.25	154 2•54 24•65 11•21	115 1.78 17.29 11.55	54 0.84 8.12 7.18	13.31
21	163 2.53 43.37 5.03	78 1•21 23•15 5•33	70 1.39 20.77 7.33	26 0.40 7.72 3.46	337 5.23
22	240 3.72 44.86 7.41	157 2.43 29.35 10.73	135 1.53 19.53 10.54	33 0.51 6.17 4.39	535 3.30
TOTAL	3238 50-21	1463 22.59	976 15.44	752 11.66	5449 103.00

TABLE E-13

ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY AGE AT ENTRY INTO THE MILITARY AND RACE/ETHNIC GROUP

RACEETH

AGEENT

TOTAL	9.23	2914	21-76	10.31	5.23	8.30	100-00
19	100-0	10000		7.1 1.3 4.5	100	2004	100
25	0000	ころろろ		_w@	UN	-40	117.
4	JEMNI		000	1 0-M	5.5		1 10-4
m	MONN	M-V-	1 -2-	200		0220	30
2	2	1 400 PM		727	2040	0000	55
	NO0.9	2000		00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	217	16.902	37
FREQUENCY ROW PCT	-	8	19	. 50	21	. 22	TOTAL.

TABLE E-14

ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986,
BY AGE AT ENTRY INTO THE MILITARY AND SEX

AGEENT	SEX		•
FREQUENCY PERCENT ROW PCT COL PCT	1) TOTAL
17	543 8.42 91.26 9.34	52 0.31 8.74 8.19	595 9.23
18	2638 40.91 90.53 45.37	276 4.23 9.47 43.46	2914 45.19
19	1261 19.55 89.33 21.69	142 2.20 10.12 22.36	1403 21.76
20	601 9.32 90.38 10.34	0.99 9.52 10.38	10.31
21	298 4•52 82•43 5•13	0.50 11.57 6.14	337 5.23
, 22 ,	473 7.33 88.41 8.14	52 0.96 11.59 9.76	335 8.30
TOTAL	5814 90 .1 5	635 9.35	6449

TABLE E-15

ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY HOME OF RECORD AND JROTC PROGRAM GRADUATED FROM

27								,		
	101	111	121	131	141	201	211	122	23	172
င	0000	200 200 200 200 200 200 200 200 200 200	,000	0.00 0.00 0.00 0.00 0.00 0.00 0.00	0000	000	25.033	0000	080	
-	0.00 6.00 6.00 6.00 6.00 6.00 6.00 6.00	70.22 70.20 70.20	2-20	0:00 0:00 0:00 0:00 0:00	1.500	0.071	0	22.0 00.0 00.0 00.0 00.0	0.20	\$20 0017
2	0000	40.04 44.44 91.09		20.03	0000	0000		10.00	0-0	
n	0000	620 200 300 300 300 300	000	0000	0000	0000	37.00%	0000	0000	
•	000	08- 08- 08- 08- 08- 08- 08- 08- 08- 08-		16.53	040	0000	2002	2.0°5 1.10°5 1.13°8	10.20	
\$	0.00	26.85		0 m 2 m 2 m 2 m 2 m 2 m 2 m 2 m 2 m 2 m	000	0.0 0.0 1.00 1.00 1.00 1.00 1.00 1.00 1	17.59	000 000 000	16.21 2.663 8278 8278	
•	200	0 K 0 K 0 K 0 K 0 K 0 K 0 K 0 K 0 K 0 K	17-98	19.55 3.05 3.05 3.05 3.05 3.05 3.05 3.05 3	36.00 2000 3000 3000	0000	14.04	1040 144 1400	0 14.1 1.25 5.25	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
e 0	0 2 2 2 2 2 2 2 2 2 2 3 5 2 3 5 3 5 5 5 7 5 7 7 7 7 7 7 8 7 8 7 8 7 8 7 8	43.50	0000	080 0.00 0.10 0.10	0-0	20.72	35.14	0000	000	
•	0000	14.29 0.02 0.05	000	28.57	000	0000	16.02	0000	0.00 0.00 0.00 0.00 0.00	°°°°
10	0000			63.17	0000	0000	000	0000	0.00	
Ξ	05/4 0 0 0 0 0 0 0 0 0	50.00 50.00 77.0	11-76	20.59	0000	0000	0.00	0000	0.00 0.00 0.004	
12	000000000000000000000000000000000000000	25.47 26.54 10.18	213 5650 6650	12.28 17.68 15.88	20.75	20-02-2	201 201 201 201 201 201 201 201 201 201	28.0 28.0 20.0 20.0 20.0 20.0 20.0 20.0	11.50	
	0.23	34.13	9 6 29	14.41	2.40		2 1 5 5 6	5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5	20.0	

(CONFINUED)

TABLE E-15 (CONTINUED)

ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986,
BY HOME OF RECORD AND
JROTC PROGRAM GRADUATED FROM

		7,29	0.7.0	30	0.35	1.81	2.22	0.12	0.35	2.87	2.51	0.11	1.37	100-001
	,	00- 25:25		°888						0.26				
	,	20.5	1 OMM	0000	000		040	0.00	0.00	2400	01.05 01.05 01.05 01.05	0000	12.26	1 100
		22.5	000	onn	0.00 .000 .000 .000	200. 200. 200. 200.	000 NNOO	0000	-5.05 -5.05 -5.05	~~~ ~~~~	3.04	0000	2.0 5.0 1.5 1.5 1.5	332
	,		1			000 000 000 000 000 000 000 000 000 00		000	000		000 N2004			21.03
	ć	0000	000	ONN Cinc	000	000			0000	300	-250	0000	000 -200 -200 -200 -200 -200 -200 -200	0.62
	· ·	0-M	0000	0000	000 000 000 000 000 000 000	000	Omn	0.00 0.00 0.00 0.00 0.00 0.00 0.00	0000	00 30 000 000	2002	0000	0000	2.40
		12.13 6.14	0.00 0.00 0.00 0.00	000 000 000	0000	0m0 044 460m	000 6000		0.00	2007	10.22 23.53.45 23.845	0000	30.40	14.41
	Ş	5.00 7.00 7.007 5.008		2000		000 40049	0.40%	0000	0.00	00 238 20 238 30 238	10.29	0000	18.90	9.29
		10	OMO OMO				0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		6 3 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -			71-435		34-13
JACFL	•	0000	0000	0000	0000	0000	000 000 000 000 000	0000	000	20.02	000	0000	10.02 20.02 20.02 20.02	0.63
404	A CALAN	1	7	15	16	17		10	20	21	. 22	23	54	TOTAL

TABLE E-15 (CONTINUED)

ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986,
BY HOME OF RECORD AND
JROTC PROGRAM GRADUATED FROM

101 172	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.7	-888	7255	-888	-888	-888		-888	-888	22.22	-222
	omo	0-0		000		000	000	000	000	000	200.0	200
23	34.38		0000	96.00 000	040 040 060 060 060	10.02	0000		0000	0.00		
122	3.03 3.13 3.33	0.00 .00 .00 .00 .00	11:02	2.87	-m-	12.50	0000	3.06	57-14 57-14 1.20	0.00 0.00 0.00 0.00 0.00	0.08 1.576 1.51	0000
211	0.03 3.13 0.03 7.03		44-44	000 000 000 000 000 000 000 000 000 00	38.74	0000	30.16	16.03	14.29	9-00		
29	0000	000	000	0.02 0.55 3.70	000	000	0.02 3.02 1.00	000	000	000	000	20.02 3.70
14]	COOL COUNT CIMINO	CC.0	000	0.4 6.6 7.6 7.6 7.6	000	000	000	0000	0000	0.02 4.76 0.65	1.30 2.00 3.00 3.00 4.00 4.00	0.02 2.13 0.65
131	25.00 23.00 3.866	00 00 00 00 00 00	0000	10.04 18.05	0-70 0-70 0-70 0-70	0000	30-10	36.235	14.29	14-29	10.17	38.238
121	21.38	-2-	220	00.2	omo	000	000	100	10.	₩ .	22.3	120
111	0.03	43.14	20-03-	52-49	41.67	0000	27-27	12.20 12.20 0.23	0000	14-29	0.00 0.00 0.00 0.00	14.89
101	0000	0000	0000	0000	0.02	0000	0000	0.02 2.44 2.33	0000	0000	0.02	0000
101 101		2.5	27	28	59	30	31	32	33	34	35	36

(CONFINUED)

TABLE E-15 (CONTINUED)

ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY HOME OF RECORD AND JROTC PROGRAM GRADUATED FROM

JESTC

40+

TOTAL	11-18	0.08	1.64	0.62	0.17	1.04	0.11	0.23	280	0.0	5.24	10.95	100.001
541	0.05 0.42 2.17					0000	-888 						
23	11.30		10 3.30 13.40 13.40			14.93	16.29 14.29 0.16	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4 60 242 3427	000	7.00	0 6 7 8 7 8 7 8	. 0
122	74.7 74.90 74.90	000	0.00	3.00 5.00 5.00 5.00	15.29	13.17	0000	3.02 5.67 5.67	0.00 0.00 0.00 0.00 0.00 0.00	0000	C017 		332 5.15
21	12.38 5.24 4.41	60.00 100.00 100.00	15.04	17.11	0000	0.00	42.86	1 3.0 2 1 3.0 2 1 3.0 2 1 3.0 2 2 1 3.0 2 2 2 3.0 2 2 2 3.0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	One News	0000	20.05	25.05 22.05 22.05	1356 21.03
102	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0000	0-1-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-	0000	0000	0000	000	000	3.700	0000	000	0-36 0-57 14-31	0.42
141	0.22 1.32 9.03	000	0++ 0 80 5 0 80 5 0 80 6	000	000	000	0000	000	0.00	000	0.00	0.12	2.40
13	14.2 17.59 15.29	20.02			10.02	22.39	000	200°3	20.24 20.24	0 0 0 3 0 0 0 3 0 0 0 2	0mw 242 2285		14.41
12	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0			02.0 2.50 1.00 1.00		17.91		30000	16.21				9.75
111	11117		0.00		70 0-0 0-0 0-0 0-0 0-0 0-0	20.23 0.657	000 000 000 000 000 000 000	10.02 0.03 0.03 0.03	100 1.55 35.71		52.28 1.20 1.20 1.85 1.85	25.76	34.13
101	13.00 0.00 0.00 0.00 0.00	00000	0000	0000	000	240 3402 3402	0000	0000	0000	0000	0-14 20-93 20-93	0.0 10.0 6.7 6.4	
	37		6 6	0,	5	2.4	£3	*	45	94	29	4	TOTAL

CONTINUE

TABLE E-15 (CONTINUED)

ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY HOME OF RECORD AND JROTC PROGRAM GRADUATED FROM

JROTE

TOTAL	0.42	0 0	287	0.31	0.85	0 350	0.39	0.11	100-00
142	°888	0000	0.14	°888	0.02	0000	0000	°888	138
231	11-11	50.03 50.00 0.31	20.21	0000	0.03	12.00	0.02	18.18 0.31	639
22	0000	0000	3 76 17 07 16 76	5-02	3-03	0000	23.00	13.03	332
21	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0000	19.85 19.16 1.06	7 0 2 2 2 1 4 4 1 4 4 1 4 4 1 4 4 1 4 4 1 4 1	2000	2005 2004 2004	36.04	36.36	1556
201	000	000	3.70	0000	6000	3.500	0000	3.90	27
141	0000	0000	000 011 014 014	000		0000	000	000	155
13	22-22-09	50-03	12.20	0000	25-00	000	0.03 0.03 0.22 0.03	0000	929
. 12	0.02 3.70 0.16	0000	01-0-4 01-0-4 0-0-1-0-1-0-1-0-1-0-1-0-1-0-1-0-1-0-1-0	0888	25.00	0888	12.00	0.002	629
11	60-17 00-74 00-24	0000	140041	200 x	000 0404 0404	36.00	20.00	2000	2201
101	0000	000	2000 2000 2000 2000 2000	000	000	0000	0000	0000	43
FRESJENCY ROW PCT COL PCT	0	0 \$	2	52	23	75	25	99	TOIAL

ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY AFOT CATEGORY AND BRANCH OF SERVICE ENLISTED INTO

AFQT	SERVICE	-			
FREQUENCY PERCENT ROW PCT COL PCT	ARMY	INAVY	 USAF	, jusmc	TOTAL
0	0.00	0.00	7 0.11 100.30 0.70	0.00	7 2.11
3	0.00	0.03 100.00 0.14	0.00 0.00 0.00	0.00).03
4	166 2.57 45.73 5.13	191 2.95 52.62 13.06	0.35 0.33 0.30	0.05 0.83 0.40	363 5.63
5	1413 21.91 52.92 43.64	562 8•71 21•05 39•41	366 5•68 13•71 36•75	329 5.10 12.32 43.75	2670 41.40
6	785 12.17 51.34 24.24	279 4.33 18.25 19.07	255 4.12 17.40 25.71	199 3.09 13.02 25.46	1529 23.71
7	809 12.54 47.62 24.98	374 5•30 22•01 25•55	316 4.90 18.50 31.73	200 3.10 11.77 25.60	1699 25.35
6	1.01 36.31 2.01	0.85 30.73 3.76	38 0.59 21.23 3.32	21 0.33 11.73 2.79	179 2.78
TOTAL	3238 50.21	1463 22.69	996 15.44	752 11.66	5449 103.00

ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY JROTC PROGRAM GRADUATED FROM AND RACE/ETHNIC GROUP

JROTC	RACEETH						•
FREQUENCY PERCENT ROW PCT COL PCT	1	12]3	! <u>÷</u>]5	!6	TOTAL
10	0.33 52.78 0.61	0.24 38.39 0.63	0.03 5.56 0.72	0.00 0.00 0.00	0.02 2.78 1.05).00).00	0.62
11	958 15.48 48.09 30.55	901 15.30 45.23 40.35	74 1.27 3.71 26.52	0.17 0.50 38.46	0.55 1.61 33.68	17 3.29 3.85 33.91	1992 34.26
12	3 24 5 • 57 5 6 • 94 10 • 36	207 3.56 36.32 9.27	24 0.41 4.21 8.50	0.35 0.33 11.34	7 1.23 7.37	7.09 7.88 7.09	570 9.30
13	4 54 7 • 81 5 4 • 63 1 4 • 52	313 5.47 38.27 14.24	0.57 3.77 11.83	0.35 0.35 11.54	15 0.26 1.81 15.79	3.14 3.96 14.55	14.29
14	72 1.24 49.32 2.30	1.10 43.34 2.37	0.10 4.11 2.15	0.33 1.37 7.59	0.00	7.03 1.37 3.64	146 2.51
20	0.21 54.55 0.38	0.10 27.27 0.27	0.03 9.09 0.72	0.00 0.00 0.00	0.00 0.00 0.00	2 2 3 3 3 3 3 4 4	0.38
21	662 11.39 54.26 21.18	423 7.28 34.67 18.94	92 1.53 7.54 32.97	0.79 0.41 19.23	27 0.46 2.21 28.42	11).19).90 23.00	1220
22	1 78 3 - 06 5 9 - 33 5 - 59	95 1.63 31.67 4.25	16 0.28 5.33 5.73	0.33 0.57 7.59	0.09 1.67 5.26) • 07 1 • 33 7 • 27	300 5.16
23	367 5.31 63.72 11.74	182 3.13 31.60 8.15	15 0.25 2.50 5.38	0.02 0.17 3.35	0.12 1.22 7.37	3.07 3.69 7.27	576 9.91
24	1.38 66.12 2.56	0.40 19.01 1.03	15 0.26 12.40 5.38	0.00 0.00	0.02 0.83 1.05	2] = 03 1	121
TOTAL	31 26 53.77	2233 38.41	279 4.80	0.45	· 95 1.63	J. 95	5814 100.00

TABLE E-18

ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986,

BY JROTC PROGRAM GRADUATED FROM AND RACE/ETHNIC GROUP

JROTC	RACEETH						
FREQUENCY PERCENT ROW PCT COL PCT				!4] TOTAL
10	0.47 42.86 1.19	0.63 57.14 1.24	0.00 0.00 0.00	0.00 0.00 0.00	0.00	3.00 3.00	1.10
11	74 11.65 35.41 29.25	109 17.17 52.15 33.85	1.57 4.78 34.48	0.31 0.36 50.30	1.89 5.74 60.00].31].96 23.57	32.91
12	3.04 42.37 9.98	4.72 50.85 9.32	0.43 5.03 10.34	0.16 1.59 25.30	0.00	3.00	9.29
13	42 6.61 42.36 15.50	51 8.03 52.04 15.34	0.31 2.04 6.90	0.00	0.31 2.04 10.00	7.16 1.02 1.29	15.43
14	0.47 33.33 1.19	0.94 50.67 1.85	0.30	0.30 0.30 0.30	0.00).00).00	1.42
20	0.31 40.00 0.79	0.47 60.00 0.93	0.00 0.00	0.30 0.32 0.30	0.00	0 0 0 0 0 0 0 0 0	- 0.79
21	51 8.03 37.50 20.16	10.71 50.00 21.12	1.37 1.37 8.32 41.33	0.30 0.30 0.30	0.63 2.94 23.00].16].74 14.29	136 21.42
2 2	21 3 • 31 65 • 63 8 • 30	10 1.57 31.25 3.11	0.00 0.00 0.00	0 - 30 0 - 30 0 - 30	0.00	1 1 - 1 5 3 - 1 3 1 4 - 2 9	5.04
23	27 4 • 25 4 2 • 36 • 10 • 67	5.04 50.79 9.94	0.10 1.59 3.45	0 • 30 0 • 30 0 • 30	0.16 1.59 5.00].31 3.17 23.57	9.92
24	0 · 79 29 · 41 1 · 98	1.42 52.94 2.30	0.16 5.38 3.45	0.16 5.38 25.30	1 0.16 5.88 5.00	.].00	17 2.68
TOTAL	253 39.84	322 50.71	4.57	0.53	3.15	1.10	100.00

TABLE E-19

ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY HIGHEST YEAR OF EDUCATION COMPLETED AND RACE/ETHNIC GROUP

HYEC	RACEETH						
FREQUENCY PERCENT ROW PCT COL PCT	1		13	l4	<u> </u>	l <u> </u>	TOTAL
2	0.00 0.00 0.00	0 0 0 0 0 0	1 0 . 3 2 1 00 . 3 0 2 . 3 6	0.30 0.30 0.30	0.00	3.00 3.00	0.02
3	7 0.12 58.33 0.22	0.07 33.33 0.18	0.02 8.33 0.36	0.00 0.00 0.00	0.00	3.00 3.00	0.21
4	38 0.65 92.68 1.22	0.03 4.38 0.09	0.02 2.44 0.36	0.00 0.00 0.00	0.00 0.00 0.00	3.00 3.00	0.71
5	64 1 • 10 71 • 91 2 • 05	0.31 20.22 0.81	7 0.12 7.37 2.51	0.33 0.30 0.30	0.00 2.00 0.00	3.00 3.00 3.00	1.53
6	25 33 48 • 73 52 • 41 90 • 63	2149 36.96 39.76 96.24	252 4.33 4.36 90.12	0.45 0.48 100.30	93 1.60 1.72 97.89	52 3.89 3.96 96.55	5405 92.97
7	57 0.98 67.36 1.52	25 0.43 29.76 1.12	0.02 1.19 0.36	0.00	0.00 0.00 0.00	1 3.02 1.19 1.82	1.44
3	0.53 64.58 0.99	0.19 22.92 0.49	0.09 10.42 1.79	0.00 0.00 0.00	0.00	1 2.08 2.08 1.82	0.83
9	0.19 61.11 0.35	7 0.12 38.89 0.31	0.00	0.JD 0.JD 0.JO	0.00 0.00 0.00).00).00	0.31
10	20 0 • 34 64 • 52 0 • 64	7 0-12 22-58 0-31	0.07 12.70 1.43	0.00 0.00 0.00	0.00 0.00	3.00 3.00	0.53
13	65 1.12 76.47 2.08	10 0.17 11.76 0.45	7 0.12 8.24 2.51	0.00 0.00 0.00	0.03 2.35 2.11	1 1.02 1.18 1.32	85 1.46
TOTAL	31 26 53.77	2233 38.41	279 4.30	0.45	95 1.63	3.95	5814 100.00

ALL SERVICES JROTC GRADUATES FOR FISCAL YEAR 1986, BY HIGHEST YEAR OF EDUCATION COMPLETED AND RACE/ETHNIC GROUP

HYEC	RACEETH						
FREQUENCY PERCENT ROW PCT COL PCT	1	2] 3	1 4	5	[6	TOTAL
2	0.00	0.00 0.00	0.00	0.00	0.00).00).00	0.00
3	0.00	0.00	0.00	0.00	0.00).00).00	0.00
4	0.00 0.00	0.00 C.00	0.00	0.00 0.00	0.00 0.00	2.00 - 2.00	0.00
5	0.00 0.00	0.00 0.00	0.00	0.00	0.00	; 2.00 2.00	0.00
6	245 38-58 40-30 96-34	306 48-19 50-33 95-03	27 4.25 4.44 93.10	0 - 53 0 - 66 100 - 00	19 2.99 3.13 95.00	1-10 1-15 103-00	608 95.75
7	0.47 23.98 1.19	10 1.57 76.92 3.11	. 0000	0.00 0.00 0.00	0.00	0 0 0 0 0 0 0 0 0	2.05
8	2 0 • 31 2 \$ • 57 0 • 79	0.47 42.86 0.93	0.16 14.29 3.45	0.00 0.00	0.16 14.29 5.00	0 0 0 0 0 0 0 0 0	1.10
9	0 - 16 50 - 00 0 - 40	0.16 50.00 0.31	0.00	0 - 00 0 - 00 0 - 00	000	; 0.00 0.00 0.00	0.31
10	0 - 31 50 - 00 0 - 79	0.31 50.00 0.62	0.00	0.00 0.00 0.00	0.00	; 0 0 0 0 0 0 0 0	0.63
13	0.00 0.00	0.00 0.00 0.00	0.16 100.00 3.45	0.00 0.00 0.00	0.00 0.00	- 000 - 000 - 000 - 000	0.16
TOTAL	2 53 3 9 • 84	322 50.71	4.57	0-53	20 3.15	1.10	100.00

TABLE E-21

ALL SERVICES JROTC MALE GRADUATES FOR FISCAL YEAR 1986, BY AFQT CATEGORY AND RACE/ETHNIC GROUP

AFQT	RACEETH						
PREDUCE NOT POUT POUT POUT POUT POUT POUT POUT PO	-		8	7	5	•	TOTAL
	66.67 0.07 0.13	16.02		•	•		0.10
٤	000	200	000	000	000	1 000	0 0 0 3
7		23 23 64.44 10.39			1	1	360
v	8 · · · ·	1 - 2 - 2 - 1 - 2 - 2 - 2 - 2 - 2 - 2 -	12-62	1	MAGAE.	INNNN	42-12
9	S=3 S=4 9	00.39	24-1	00.1	0 2 4 5 7 4 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7	3.2	1311
7	7.2	024	1 242	000	640	000	26.13
œ	4-1-4-1-4-7	200	044	000	400	0.00	2.87
TOTAL	12	23	24		10.0	100.	100.00

TABLE E-22

ALL SERVICES JROTC FEMALE GRADUATES FOR FISCAL YEAR 1986, BY AFQT CATEGORY AND RACE/ETHNIC GROUP

	TOTAL	0.16	0.00	0.47	34.80	34.33	28.35	1.89	100.00
	9			1 000	3.0.0	1 300	000	000	-
	15	0000	0.0	000		1.1	000		1~-
	4	0000	0.0	1	mno	50.0	00.0	000	. 5
	Pr)	000	0.0		-m-m	1 - ev	400	m vo 0	715
	: .	000	0.0	400	1 mor-m	2000 2000 2000 2000	0.M8	080 	32
RACEETH		100.00			1		30.7		₩
AFOT	FREQUENCY ROW PCT		m	*		•	_	ε 0	TOTAL

TABLE E-23

ALL SERVICES JROTC MALE GRADUATES FOR FISCAL YEAR 1986, BY BRANCH OF SERVICE ENLISTED INTO AND RACE/ETHNIC GROUP

		TOTAL	2898 49.85	19.09	14.90	12.33	3.84	100.00
		0		000	1 0	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0000	100
	ū			0		1 -wm	000	100
	7	* ! ! ! !	46.72	400	00.0	1 040	000	
	\$			040	200	100NW	08.0 	N.
	÷ ,	1	247	376	2.6	40F 0 0 0 0 0 0 0 0 0	1 1 2 4 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	23
RACEETH	Ξ	İ	4 · · · · · · · · · · · · · · · · · · ·	646 11-11 58-20 20-67	73.07	200 H	- 0000 1	12.
SVC	PERCENT ROW PCT	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-	2	m	7	∞	TOTAL.

TABLE E-24

ALL SERVICES JROTC FEMALE GRADUATES FOR FISCAL YEAR 1986, BY BRANCH OF SERVICE ENLISTED INTO AND RACE/ETHNIC GROUP

	TOTAL	53.54	20.16	20.47	5.51	0.31	100.00
		57-14	1	NOW I	000	000	-
	5			MNO	-&0	000	104
-	7	0.47 0.88 75.00	000	000	-m0	000	. 5
	٣	•	700	MN O	1 22	000	.52
		10000-	<u></u> σωσί	866	7.8 3.7 7.0 7.0	-0m	32
RACEETH		18.58 34.71 46.64	804	0400	080 400 1		120
SVC	FREQUENCY ROW PCT		2	£	3	∞	TOTAL

TABLE F-1

ALL NAVY JROTC PROGRAM GRADUATES

TERM OF ENLISTMENT FOR

CUMULATIVE PERCENT 25 20 00 00 CUMUL ATIVE FREQUENCY 948378 FREDUENCY 2099

TABLE F-2

ENTERING PAYGRADE FOR ALL NAVY JROTC PROGRAM GRADUATES

U	12.7 42.0 99.9 100.0
CUMULATIVE FREQUENCY	122 404 960 961
PERCENT	22.7 57.9 0.1
FREQUENCY	785 766
ENT_PG	- COM4

TABLE F-3

NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY SEX AND BRANCH OF SERVICE ENLISTED INTO

Y L	SERVICE				
- >	ARMY		USAF	I DARC	A T C T
-	33 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	348 346 346 346 346 346 346	000000000000000000000000000000000000000	112 126 3 3 5 5 5 6	93.5
2	134	MVW0	000	87-0	6
	37.36	INM			103.0

NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986,
BY RACE/ETHNIC GROUP AND
BRANCH OF SERVICE ENLISTED INTO

TABLE F-4

RACEETH	H	SERVII	Ε .			
FREQUEN PERCEN ROW PO	NC Y NT CT	ARMY	! NAVY	 USAF	บรลเ	TOTAL
	1	196 20.40 35.77 54.60	224 23.31 40.38 59.26	59 6-14 10-77 64-13	7.18 12.59 52.27	548 57.02
	2	155 16.13 45.32 43.19	111 11-55 32-46 29-37	27 2•31 7•39 29•35	5.10 14.33 37.12	342 35•59
	3	3 0.31 6.98 0.34	29 3.02 67.44 7.67	3 · 0 • 31 6 • 98 3 • 25	8 0.83 13.60 6.06	43 4.47
	4	0.10 15.67 0.28	0.42 66.57 1.06	0.30 0.30 0.30	1 0.10 16.67 0.76	J. 62
	5	0.31 25.00 0.34	7 0.73 58.33 1.35	1 0.10 8.33 1.09	0.10 8.33 0.76	12 1.25
	6	0.10 10.00 1.23	3 0.31 30.00 0.79	2 0 • 21 20 • 00 2 • 17	0.42 40.00 3.03	10
TOTAL	· †	359 37.36	378 39.33	92 9.57	132	961 103-00

NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY RACE/ETHNIC GROUP AND AFOT CATEGORY

AFQT

RACEETH

TOTAL	57.02	35.59	4.43	0.62	1.25	1.04	100.001
<u>.</u>	2 91 5 11 5 10	000	1	000	000	000	~6
12	200 200 36.50 78.13	5-1	900	2007	-mm	400	25
9	10000	1 ~0 ~0 ~0		i mom	202	MOM	25
	1 8 4 5 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		601	100	440	M07	3.8
7		MON	0m8	000	1.63	000	00.
FREQUENCY ROW PCT COL PCT		2	٤	7	5	9	TOTAL

TABLE F-6

NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY SEX AND AFOT CATEGORY

		3 TOTAL	90.53	9.47	100,000
	,			22.20	2 28
		7		200	256
	•	9	196 0.40 2.53 7.50	INONE	23.31
	•	<u> </u>	m	MV&	396
AFQT		7	9 4 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8		6.97
SEX	FREGUENCY PERCENT ROW PCT				TOTAL

TABLE F-7

NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY SEX AND RACE/ETHNIC GROUP

RACEETH

SEX

TOTAL	90.53	9.47	100,001
9	000	11.10	101
35	100.00	0000	1.25
7	8 0 5 5 5 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	0-10-11-10-11-10-11-11-11-11-11-11-11-11	0.52
m	4 10 4 10 94 10 93 02	0M.0 M.0 M.0 M.0	4.67
	31.43 34.71 34.71 88.30		35.59
1	5 2 2 4 5 2 - 2 4 5 7 - 70 9 1 - 61	50.79 50.55 8.39	57.02
PERCENT POW PCT COL PCT	-	2	TOTAL

TABLE F-8

NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY HIGHEST YEAR OF EDUCATION COMPLETED AND BRANCH OF SERVICE ENLISTED INTO

HYEC	SERVICE			•	
FREQUENCY PERCENT ROW PCT COL PCT	ARMY	Į NAVY	USAF	usmc	, TOTAL
2	0.00 0.00 0.00	0.10 100.33 0.23	0.30 0.30 0.30	0.00 0.00 0.00) 10 10 1
3	0.00	0.21 100.00 0.53	0.39 0.30 0.30	0.00 0.00 0.00	2.21
4	0.31 60.00 0.34	0.10 20.00 0.25	0.09 0.30 0.30	0.10 20.00 2.76	3.52
5	0.31 15.79 0.84	15 1.56 78.95 3.97	0.00 0.00 0.00	0.10 5.26 0.76	15 98 16 98
6	338 35.17 33.11 94.15	333 34.65 37.54 83.13	3.95 9.70 93.43	130 13.53 14.66 98.48	92.30
7	0.42 33.33 1.11	0.42 33.33 1.06	0 • 42 33 • 33 4 • 35	0.00 0.00 0.00	1 L 25
8	2 0 • 21 22 • 22 0 • 56	0.52 55.56 1.32	0.21 22.22 2.17	0.00)L94
9	0.10 25.00 0.28	0.31 75.00 0.79	0.00 0.00 0.00	0.00	3.42
1 0	0.42 57.14 1.11	0.31 42.86 0.79	0.00 0.00	0.00 0.00 0.00)473
13	0.42 25.67 1.11	11 1.14 73.33 2.91	0.00 0.00 0.00	0.00 0.00 0.00	1.56
TOTAL	35 9 37.36	378 39.33	9.57	132 13.74	961

NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY HIGHEST YEAR OF EDUCATION COMPLETED AND RACE/ETHNIC GROUP

TABLE F-9

HYEC	RACEETH	•					,
FREQUENCY PERCENT ROW PCT COL PCT	1] 2] 3	<u> </u>	į5	j <u> </u>	Į TOTAL
2	0.00	0.00	100.33	0.33 0.33 0.33	0.00 0.00 0.00	3 00 3 30 3 00	0.10
3	0.10 50.00 0.18	0.10 50.00 0.29	0.00 0.00	0.00	0.00 0.00 0.00	3.00 3.00 3.00	0.21
4	100.00	0.00 0.00 0.00	0.00	0.30	0.00 0.00 0.00	3.00 3.00 3.00	0.52
5	11 1 - 14 57 - 99 2 - 01	0.42 21.05 1.17	0.42 21.35 9.30	0.30 0.30 0.30	0.00 0.00	3.00 3.00 3.30	1.98
6	4 36 51 - 61 55 - 32 90 - 51	329 34-13 36-98 95-91	35 3.54 3.95 81.40	0.52 0.58 100.30	1.25 1.25 1.35 100.00	1.04 1.13 103.00	92.30
7	0.62 50.30 1.09	0.62 50.03 1.75	0.00	0.30 0.30 0.30	0.00 0.00 0.00	0 0 0 0 0 0 0 0 0 0 0	1.25
8	0.73 77.78 1.28	0.00 0.00 0.00	0.21 22.22 4.65	0.30 0.30 0.30	0 0.00 0.00	0 0 0 0 0 0 0 0	0.94
9	0.42. 100.00 0.73	0.00	0.30	0.30 0.30 0.30	0.00 0.00 0.00	0 1.00 1.00	0.42
10	0.52 85.71 1.09	0.10 14.29 0.29	0.00 0.00 0.00	0.30 0.30 0.30	0.00 0.00 0.00	0 0 0 0 0 0 0 0 0 0 0	0.73
13	1 - 25 80 - 90 2 - 19	0.21 13.33 0.58	0.10 6.57 2.33	0.00 0.00	0.00 0.00	3.00 3.00	1.56
TOTAL	548 57.02	342 35.59	4.47	0.52	1.25	10 1:04	961 100.00

TABLE F-10

NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986,
BY HIGHEST YEAR OF EDUCATION COMPLETED AND SEX

HYEC	SEX		
FREQUENCY PERCENT ROW PCT COL PCT	1	2	TOTAL
2	0.10 100.00 0.11	0.00 0.00 0.00	0.10
3	0.21 100.00 0.23	0.30 0.30 0.30	0.21
4	0.52 100.00 0.57	0.00 0.00	0.52
5	19 1.98 100.30 2.13	0 0 - 00 0 - 00 0 - 00	19 1.98
6	802 83.45 90.42 92.13	8.34 9.58 93.41	92.3C
7	0.94 75.00 1.03	0.31 25.30 3.30	1.25 1.25
8	0.24 103.00 1.03	0.00 0.00 0.00	o.94
9	0.42 100.30 0.46	0.00 0.00 0.00	0.42
10	0.52 71.43 0.57	2 0 • 21 28 • 57 2 • 20	0.73
13	14 1.46 93.33 1.51	1 0.10 6.57 1.10	15 1.56
TOTAL	870 90.53	91 9.47	100.00

TABLE F-11

NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY AGE AT ENTRY INTO THE MILITARY AND BRANCH OF SERVICE ENLISTED INTO

AGEENT	SERVICE				
FREQUENCY PERCENT ROW PCT COL PCT	ARMY	NAVY	USAF	US4 C	- TOTAL
17	39 4.06 39.80 10.86	37 3.85 37.76 9.79	0.52 6.12 6.52	16 1.66 15.33 12.12	13.20
16	166 17.27 35.93 46.24	180 18.73 38.96 47.62	45 4.58 9.74 43.71	71 7.39 15.37 53.79	462 43.07
19	66 6.87 37.71 13.33	70 7.23 40.30 18.52	14 1.46 8.00 15.22	25 2.60 14.29 13.94	175 13.21
20	38 3.95 33.00 10.53	40 4.16 40.25 10.55	10 1.34 10.39 10.37	1.25 1.25 12.00 9.09	100
21	19 1.98 42.22 5.29	14 1.45 31.11 3.70	0.52 11.11 5.43	7 0.73 15.56 5.30	4.63
22	31 3.23 38.27 8.64	37 3.35 45.68 9.79	12 1.25 14.31 13.34	0.10 1.23 0.76	81 3.43
TOTAL	359 37 . 36	373 39 . 33	92 9.57	132 13.74	761 100.00

TABLE F-12

NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY AGE AT ENTRY INTO THE MILITARY AND RACE/ETHNIC GROUP

RACEETH

AGEENT

TOTAL	10.20	48.07	18.21	10.41	4.68	8.43	100.001
9	•	N40	0=0	000	1 -20		1-0
5	0.10	I NUM	000 1000	80%	000		-2-
4	•		00.1	000	000		- 5
m.			an. (v)	400	000		ヤセ
	2 9 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	1 - · · · · · · · · · · · · · · · · · ·	10000	95.1	22.7	1 - 2 8 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	35.59
-		SONTO		4000	- 604	 	
PREDUENCY COUNTY COULD PCT	-	18	19	20	21	22	TOTAL

TABLE F-13

NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986,
BY AGE AT ENTRY INTO THE MILITARY AND SEX

AGEENT	SEX	•	
FREQUENCY! PERCENT ROW PCT COL PCT	11	21	TOTAL
17	94 - 9.78 95.92 10.80	0.42 4.38 4.40	10.20
1 5	419 43.60 90.59 48.16	43 4•47 9•31 47•25	462 43.07
19	157 16.34 89.71 18.05	18 1-37 10-29 19-78	175 13.21
20	91 9.47 91.00 10.46	9 0.74 9.00 9.39	100
21	37 3.95 82.22 4.25	0.33 17.78 8.79	45 4.63
, 22	72 7.49 83.39 8.28	9 0.94 11.11 9.39	81 8.43
TOTAL	870 90.53	91 9.47	761 100.00

NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY HOME OF RECORD AND JROTC PROGRAM GRADUATED FROM

TABLE F-14

HOR	JROTC		
FREQUENCY PERCENT ROW PCT COL PCT	12	1 22	TOTAL
1	1.77 89.47 2.70	0.21 10.53 0.50	1.98
2	50.10	50.30	0.21
4	0.73 58.33 1.11	0.52 41.57 1.51	1.25
5	75.00 1.43	25.30 0.70	1.25
6	30.33 80.35 5.39	0.33 20.30 2.41	4.16
10	0.10 100.30 0.16	0.00 0.00 0.00	0.10
11	100.33	0.00 0.00 0.00	0.42
12	10.20 64.05 15.55	5.72 35.75 16.57	15.92
13	37 3.25 71.15 5.39	15 1.56 28.35 4.52	5.41
14	0.52 50.00 0.79	0.52 50.30 1.31	1.04
15	0.52 83.53 0.79	0-10 16-57 0-30	0.62
16	0.31 75.00 0.48	0.10 25.00 0.30	0.42
TOTAL	65.45	332 34.55	100.00

(CONTINUED)

TABLE F-14 (CONTINUED)

NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY HOME OF RECORD AND JROTC PROGRAM GRADUATED FROM

HOR	JROTC		
FREQUENCY PERCENT ROW PCT COL PCT	12	22	TOTAL
17	0.42 66.67 0.54	0.21 33.33 0.50	0.62
13	0.34 75.00 1.43	0.31 25.00 0.70	1.25
20	0.21 66.57 0.32	0.10 33.33 0.30	0.31
21	18 1.87 60.30 2.36	1.25 40.30 3.31	3.12
22	19 1.95 82.51 3.02	0.42 17.39 1.20.	2.39
24	2.50 82.76 3.32	0.52 17.24 1.51	3.02
25	7 0.73 87.50 1.11	0.10 12.50 0.30	0.83
26	0.94 75.00 1.43	0.31 25.30 0.70	1.25
27	0.21 66.67 0.32	0.10 33.33 0.30	0.31
23	1.37 72.30 2.36	7 0.73 28.30 2.11	25 2.60
29	0.31 30.00 0.48	7 0.73 70.39 2.11	1.04
30	0.52 35.71 0.95	0.10 14.29 0.30	0.73
TOTAL	629 65.45	332 34.55	100.00

(CONTINUED)

TABLE F-14 (CONTINUED)

NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY HOME OF RECORD AND JROTC PROGRAM GRADUATED FROM

HOR	JROTE		
FREQUENCY PERCENT ROW PCT COL PCT	12	j. 22	TOTAL
. 32	0.52 55.56 0.79	0.42 44.44 1.20	0.94
33	0.10 20.00 0.16	0.62 20.30 1.20	0.52
34	0.83 80.00 1.27	0.21 20.00 0.50	1.04
35	2.50 82.76 3.82	0.52 17.24 1.51	3.02
36	0.62 100.30 0.95	0.00 0.00	J. 62
37	57 5.93 69.51 9.36	2.50 30.49 7.53	8.53
38	0.00	0.10 100.00 0.30	3.10
39	20 2.38 76.92 3.18	0.52 23.33 1.31	2.71
40	0.10 33.33 0.16	0.21 66.57 0.50	0.31
41	0.00	0.10 100.20 0.30	0.40
. 42	1.25 63.16 1.91	7 0 - 73 36 - 34 2 - 11	19 1.98
44	0.52 83.33 0.79	0.10 16.57 0.30	0.62
TOTAL	629 65.45	332 34.55	761

(CONTINUED)

TABLE F-14 (CONTINUED)

NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY HOME OF RECORD AND JROTC PROGRAM GRADUATED FROM

HOR	JROTC		
FREQUENCY PERCENT ROW PCT COL PCT	12	22	TOTAL
45	4.79 67.55 7.31	22 2.29 32.35 6.53	7.08
47	15 1.56 65.22 2.38	0.33 34.78 2.41	2.39
48	4.37 50.50 6.68	41 4.27 49.40 12.35	3.64
49	0.10 100.00 0.16	0.30 0.30 0.30	, 3.10
51	3.32 37.18 4.61	5.19 62.32 14.76	78 8.12
5 2	0.00	0.10 100.30 0.30	0.10
. 53	13 1.35 81.25 2.07	0.31 13.75 0.90	1.66
5 5	0.31 37.50 0.43	0.52 62.50 1.51	0.83
56	0.10 33.33 0.15	0 • 21 66 • 57 0 • 50	0.31
TOTAL	629 65.45	332 34.55	761 100.00

TABLE F-15

NAVY JROTC PROGRAM GRADUATES FOR FISCAL YEAR 1986,
BY AFQT CATEGORY AND BRANCH OF SERVICE ENLISTED INTO

AFQT		SERVICE				
FREQUE PERCE ROW P COL P	NC Y NT CT CT	ARMY	INAVY	USAF	[บรพ c	TOTAL
	4	19 1.93 23.36 5.29	46 4.79 68.55 12.17	2 0.21 2.79 2.17	0.00	5.97
	5	153 15.92 39.64 42.62	139 14.46 36.01 36.77	32 3.33 8.29 34.73	62 5.45 16.06 46.97	386 43-17
	6	82 8.53 30.61 22.64	35 37 37 22 49	21 2.19 9.38 22.33	36 3.75 15.07 27.27	23.31
	7	97 10.09 37.89 27.02	9-47 35-55 24-07	35 3.54 13.57 33.34	33 12.89 25.00	256 25.64
	ô	0.83 23.57 2.23	1.77 1.77 60.71 4.50	0.21 7.14 2.17	0.10 3.57 0.76	2.91
TOTAL		359 37.36	378 39.33	92 9.57	132 13.74	961

TABLE F-16

NAVY JROTC MALE PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY JROTC PROGRAM GRADUATED FROM AND RACE/ETHNIC GROUP

570	34.48	100.00
3.55	1 40M4 1 4	1603
5 8 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	4 1 6 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1.38
r:3800 000 000 000 900	00.23	0.57
2.76 4.21 60.00	- mmc	05.4
210	00.04	34.71
200	200178 350.448 35.446	57.70
12	22	1
	12 37-24 23-79 2-76 0-34 0-53 1-23 1-88 65-5 64-54 68-54 60-00 60-00 58-33 55-56	12 37 26 36 36 36 36 36 36 36 36 36 3

TABLE F-17

NAVY JROTC FEMALE PROGRAM GRADUATES FOR FISCAL YEAR 1986, BY JROTC PROGRAM GRADUATED FROM AND RACE/ETHNIC GROUP

	TOTAL	59	35.16	100-001
	9	0000	103.10	1111
		000	000	00.0
	4	100.30	0000	1.10
		105 50 50 50 50 50 50	0000	3,30
		32.97 50.85 75.00		43.96
RACEETH		27 - 47 42 - 37 54 - 35		50.55
JROTC	FREQUENCY PERCENT ROW PCT COL PCT		22	OTAL

END NOTES

- 1. Chief of Staff of the Army Headquarters, Department of the Army, ROTC Study Group Report Vol. II JROTC (1916-1985), Government Printing Office, Washington, D.C., 1986.
- 2. Chief of Naval Education and Training, Department of the Navy, NJROIC Fact Sheet, Government Printing Office, Washington, D.C., 1986, p. 1.
- 3. Ibid., p. 1.
- 4. Ibid., p. 1.
- 5. Chief of Naval Education and Training, Department of the Navy, NJROTC Information Booklet, Government Printing Office, Washington, D.C., 1986, p.1.
- 6. Certain variables (e.g., sex) had a category for members who did not fall under the proper classification (e.g., male or female). This undefined category is due to having a blank on this portion of the file format sheet. The amount of these errors for all variables was under one percent of the total population size observed.
- 7. Due to the errors mentioned above in end note six, the cross-tabulation tables reflected a difference in totals between certain variables measured. Again, this difference in totals was never greater than one percent of the total population size observed.
- 8. Data from fiscal years 1977-1986 were used because the files prior to fiscal year 1977 were incomplete and the files for fiscal year 1987 were not fully updated when this research began.
- 9. Berenson, M.L. and Levine, D.M., <u>Basic Business</u>
 Statistics Concepts and <u>Applications</u>, third edition,
 p. 111, Prentice-Hall, 1986.
- 10. Ibid., p. 113.
- 11. Bowman, W., Little, R., and Silicia, G.T., The All-Volunteer Force After a Decade, p. 33, Pergamon-Brassey's, 1986.

BIBLIOGRAPHY

Barker, E.L., "Naval Youth Programs," <u>United States Naval</u> Institute Proceedings, V. 99, June 1973.

Berenson, M.L. and Levine, D.M., <u>Basic Business Statistics</u> Concepts and Applications, 3rd ed., <u>Prentice-Hall</u>, 1986.

Bowman, W., Little, R., and Silicia, G.T., The All-Volunteer Force After A Decade, Pergamon-Brassey's, 1986.

Capozzalo, D.S., "NJROTC: Profile and Practice," <u>United</u> States Naval Institute Proceedings, V. 101, July 1975.

Chief of Naval Education and Training, Department of the Navy, NJROTC Fact Sheet, Government Printing Office, Washington, D.C., 1986.

Chief of Naval Education and Training, Department of the Navy, NJROTC Information Sheet, Government Printing Office, Washington, D.C., 1986.

Chief of Staff of the Army Headquarters, Department of the Army, ROTC Study Group Report, Vol II - JROTC (1916-1985), Government Printing Office, Washington, D.C., 1986.

Kennedy, R.W., "Navy Blue and Blonde," <u>United States Naval</u> Institute Proceedings, V. 99, August 1973.

Lindner, E.W., "Our Classist Army/How the Pentagon Cons Kids," Christianity and Crisis, V. 37, 16 May 1977.

Murphy, T.W., "High School Howgozit - The NJROTC Comes of Age," <u>United States Naval Institute Proceedings</u>, V. 99, September 1973.

Smith, W.L., "NJROTC - A Chance to Grow," Campus, July 1979.

INITIAL DISTRIBUTION LIST

		No.	Conie
1.	Defense Technical Information Center Cameron Station Alexandria, Virginia 22304-6145	,	2
2.	Library, Code 0142 Naval Postgraduate School Monterey, California 93943-5002		2
3.	Chairman Department of Administrative Sciences, Code 5 Naval Postgraduate School Monterey, California 93943-5000	4	1
4.	Ronald Weitzman, Code 54 Naval Postgraduate School Monterey, California 93943-5000		1
5.	Henry A. Zwartz P. O. Box 18-1864 Coronado, California 92118		2
5.	Department of the Navy Chief of Naval Education and Training Naval Air Station Pensacola, Florida 32508-5100		1
7.	Marie Hashimoto Department of Aeronautics, Code 67 Naval Postgraduate School Monterey, California 93943-5000		1





Thesis

Z86

Zwartz

c.1 An empirical analysis of the Navy Junior Reserve Officer Training Corps (NJROTC).

Thesis

286 c.1 Zwartz

An empirical analysis of the Navy Junior Reserve Officer Training Corps (NJROTC).



thesZ86
An empirical analysis of the Navy Junior

3 2768 000 78760 0

DUDLEY KNOX LIBRARY